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## **Transcript of Day 6**

Tuesday, June 24, 2025

***OSHA Heat Injury and Illness Prevention Hearing***

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5 OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

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9 OSHA'S INFORMAL RULEMAKING HEARING

10 FOR HEAT INJURY AND ILLNESS PREVENTION IN OUTDOOR AND

11 INDOOR WORK SETTINGS

12

13 Day 6 of 12

14 Tuesday, June 24, 2025

15 9:30 a.m.

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of Administrative Law Judges, United states

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Department of Labor

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## P R O C E E D I N G S

JUDGE BELL: This is an informal public hearing on the Occupational Safety and Health Administration's proposed rule for Heat Illness and Injury Prevention in Outdoor and Indoor Work Settings. The Notice of Proposed Rulemaking was published in the Federal Register on August 30, 2024, in volume 89 of the Federal Register, beginning at 70,698.

I'm Steve Bell, the Administrative Law Judge from the U.S. Department of Labor, who will be presiding over the hearing today. The purpose of the hearing is to receive, from interested parties, oral testimony, as well as other information pertinent to the proposed rule. After this hearing and after the post-hearing comment period have closed, OSHA will review the entire record in determining the content of the final rule.

My role as presiding judge will be limited to conducting this hearing to assure that a complete and accurate record has been made and that all interested parties have received a fair hearing and have had an opportunity to present their information. The hearing schedule and OSHA's procedures governing this hearing

1 are available on the website for this hearing,  
2 [www.osha.gov/heat-exposure/rulemaking](http://www.osha.gov/heat-exposure/rulemaking). These  
3 documents were sent to people and organizations who  
4 filed a timely notice of intention to appear at this  
5 hearing.

6 A few words about the nature of the hearing.  
7 Despite the informal nature of the hearing, it is  
8 governed by rules, both OSHA's rules governing public  
9 hearings, which can be found at 29 CFR part 1911, and  
10 the hearing procedures issued, which are specific to  
11 this rulemaking. These rules are meant to assure that  
12 everyone has a fair opportunity to speak and express an  
13 opinion about the proposed rule. To that end, they  
14 also allow me to hold witnesses to their allotted time,  
15 to limit undue repetition or excessive argument, and to  
16 generally try to keep the hearing on schedule.

17 Any written comments you have submitted to the  
18 docket are already part of the record for this  
19 rulemaking. In the rare case where witnesses wish to  
20 provide other documents that have not already been  
21 entered into the docket, they should provide them by  
22 email to [OSHAevents\\_dsg@dol.gov](mailto:OSHAevents_dsg@dol.gov) before the witness



1 begins their testimony, so that they can be entered as  
2 exhibits in the record.

3 Because all pre-submitted documents are already  
4 part of the record, your oral testimony should  
5 concentrate on presenting the highlights of your  
6 written comments or clarifying your written submission.  
7 Hearing participants may also submit additional  
8 evidence or statements for a period of 90 days after  
9 the close of this hearing, which will be September  
10 30th, 2025. At that point, the record for the  
11 rulemaking will close.

12 Today, each speaker or panel of speakers, after  
13 they've gotten done with their oral testimony, OSHA  
14 representatives will have the opportunity to ask  
15 questions for that speaker or that panel. When OSHA  
16 has finished asking their questions, there will be an  
17 opportunity for others -- as time permits, for persons  
18 who filed the appropriate paperwork in order to be able  
19 to ask questions of that witness.

20 This is the process I intend to follow. After  
21 OSHA has finished asking questions of a witness or  
22 panel, I will ask participants who wish to ask

1 questions of the witness to identify themselves by  
2 pressing the raise hand button if you're in the Webex  
3 meeting, or by pressing star three on their phones, for  
4 those who've called in by telephone.

5 Based on the hearing schedule and the number of  
6 participants who wish to ask questions, I'll determine  
7 the order in which participants will question the  
8 particular witness or panel and any time restrictions  
9 that may apply to that questioning. If there are more  
10 questions than we have time for today, it may be  
11 possible to ask additional questions after the  
12 conclusion of the final witness's testimony.

13 Further, if witnesses are unable to answer  
14 questions during today's hearing or would like to  
15 expand on the answers that they've provided, they're  
16 welcome to use the post-hearing comment period to  
17 submit such additional information.

18 I would also like to remind you that this  
19 proceeding is being recorded and transcribed by a court  
20 reporter. To ensure that the reporter is able to  
21 provide an accurate record of all testimony and all the  
22 questions and responses, please try to remember to

1 provide oral, verbal responses to all questions. The  
2 court reporter may have a hard time seeing if you only  
3 nod or shake your head in response to a question. And  
4 I'll try to prompt you to -- to provide an oral  
5 response.

6 In addition, please remember to identify yourself  
7 before beginning your testimony and before asking or  
8 answering a question. And do not worry. I know many  
9 participants are not accustomed to doing these things,  
10 and I'll do my best to remind you as we go along. The  
11 transcript of the hearing will be uploaded to the  
12 hearing docket on regulations.gov approximately two  
13 weeks following the hearing.

14 Unless there are further announcements or other  
15 housekeeping matters, I believe we are ready to begin  
16 with public testimony. The -- the expected speaking  
17 order is currently displayed on the screen. Our  
18 contractor will introduce each speaker in turn and  
19 promote them to panelist. When you are called to  
20 testify, please state your name and affiliation for the  
21 record. Speak slowly and clearly so that our court  
22 reporter can record these proceedings accurately. With

1 all of that out of the way, I think we're ready to  
2 begin.

3 MS. CARLON: The first speaker will be Connie  
4 Klinkam. Please state your name and affiliation for  
5 the record.

6 MS. KLINKAM: Hello, my name is Connie Klinkam and  
7 I will be presenting comments for the Composite Panel  
8 Association. I want to thank you for the opportunity  
9 to share the perspectives of CPA on the OSHA heat  
10 proposal.

11 CPA was founded in 1960 and is a trade association  
12 representing more than 95 percent of the North American  
13 manufacturing capacity of composite wood products.  
14 This includes particleboard, medium density fiberboard  
15 (MDF), and hardboard. CPA members also include those  
16 companies that supply, distribute, and use these panels  
17 to make other nonstructural, value-added products such  
18 as furniture, cabinets, flooring, moldings, and  
19 exterior siding and trim, among other products. The  
20 total impact of the composite panel industry in the US  
21 is over 7 billion annually. The industry supports over  
22 22,500 well-paying jobs, many of which are in rural

1 parts of the country.

2 CPA recommends three changes to the proposed heat  
3 illness regulation. First, we recommend that the rule  
4 address the unique circumstances associated with heat-  
5 generating industrial processes. The process of  
6 pressing composite wood panels generates heat and,  
7 therefore, would fall under this consideration. Such a  
8 provision could be modeled by the Oregon State Heat  
9 Illness Prevention Rule. Under this rule, the effect  
10 of the heat-generating manufacturing process is taken  
11 into consideration through the implementation of  
12 engineering and administrative controls, and is not  
13 reliant on a definitive temperature threshold, such as  
14 80 degrees Fahrenheit.

15 Second, CPA recommends a change to temperature set  
16 points for the initial heat conditions and high heat  
17 conditions. We suggest that the heat index set point  
18 be changed from 80 degrees Fahrenheit to 90 degrees  
19 Fahrenheit, and the high heat index set point be  
20 changed from 90 degrees Fahrenheit to 100 degrees  
21 Fahrenheit. Adjusting these set points as suggested  
22 decreases the potential burden for manufacturers in the

1 southern part of our country. Heat indexes of 80  
2 degrees Fahrenheit in the southern portion of our  
3 country are routinely encountered. If the proposed  
4 regulation maintains the current set points for initial  
5 heat and high heat, our southern manufacturers would be  
6 overly burdened.

7 Additionally, we suggest that the high heat  
8 illness prevention regulation consider adjusting these  
9 set points to account for natural acclimatization in  
10 different regions of our country. For example,  
11 employees that are acclimatized to the high humidity,  
12 high temperature environment of the southern part of  
13 our country would be less likely to be adversely  
14 affected by the same heat index as an employee in a  
15 drier and more temperate environment of another part of  
16 our country. The set points, as proposed, do not take  
17 employee acclimatization into consideration.

18 Third, the CPA recommends that proposed regulation  
19 excludes workers that work in an outdoor environment,  
20 in a primarily sedentary role. The proposed regulation  
21 provides exclusions for indoor workers that primarily  
22 work in a sedentary role. CPA suggests that the same

1 exclusion be afforded to outdoor workers that work in a  
2 predominantly sedentary role. Examples of these  
3 employees would be operators of forklifts and front end  
4 loaders. These workers rarely perform strenuous  
5 activity and primarily are sedentary on their pieces of  
6 equipment. CPA suggests that the same accommodation  
7 provided for indoor sedentary workers be applied to  
8 outdoor sedentary workers.

9 In conclusion, the Composite Panel Association  
10 believes that the rule, as proposed, will unnecessarily  
11 burden many of our manufacturing members, especially in  
12 the southern portion of our country. By incorporating  
13 the changes that we have suggested, some of this burden  
14 may be alleviated while still providing important heat  
15 protection for our valuable employees. Once again,  
16 thank you for allowing me to present our concerns  
17 regarding the proposed heat regulation, and I would be  
18 happy to address any questions about our views.

19 JUDGE BELL: Ms. Klinkam, thank you very much for  
20 your testimony. Are there questions for Ms. Klinkam  
21 from the OSHA room?

22 MR. LEVINSON: Yes, Your Honor. Andrew Levinson

1       for OSHA. Thank you very much for your testimony, Ms.  
2       Klinkam. So I just had a question about heat-  
3       generating processes. Are you proposing that all heat-  
4       generating processes be eliminated or be excluded from  
5       the reg? Or when you talked about the Oregon approach,  
6       if industrial -- sorry, if industrial hygiene controls  
7       are used to reduce heat exposures to heat-generating  
8       processes, how would the agency assess whether or not  
9       those industrial hygiene controls were adequate to  
10      protect those workers?

11           MS. KLINKAM: This is an excellent question, and I  
12      appreciate you asking it. As -- as -- in the Oregon  
13      rule they're not completely exempt, but the heat  
14      generation in the area is considered as a part of the  
15      environment in which the employees are -- are  
16      consistently exposed to. This -- the Oregon rule was  
17      written primarily with bakeries in -- in mind, but the  
18      composite panel industry is very similar to that in the  
19      fact that you still need to provide engineering and  
20      administrative controls for your employees, but it's  
21      not based on an external temperature. So we're not --  
22      not suggesting that it be excluded completely, but that



1           it be considered.

2           MR. LEVINSON: Thank you. My next question  
3           relates to your remark about people who are primarily  
4           sedentary and working outdoors. In your industry,  
5           those folks, particularly fork truck drivers, for  
6           example, do they have some sort of shade structure over  
7           their head attached to the forklift, or are they in  
8           direct sunlight while they're outdoors as well?

9           MS. KLINKAM: Again, an excellent question. And  
10          there's a large variation of what is seen in, you know,  
11          in the industry. Predominantly, honestly, many of our  
12          forklift drivers are in an air-conditioned cab which  
13          would exclude them from this anyway. But most of them  
14          would have a shade structure, at least a roofing system  
15          over them. That's a safety concern, not just for heat  
16          regulation, but for -- to protect the employee. So  
17          there are some that are completely open, but most of  
18          them at least have a roof cover.

19          MR. LEVINSON: Thank you. And it seemed, at least  
20          in the room, like that got -- your voice got much  
21          quieter. I just want to make sure, Your Honor, did you  
22          hear that? And/or did the court reporter catch

1 everything she said?

2 JUDGE BELL: Christine, were you able to hear the  
3 witness's last answer?

4 THE REPORTER: Yes, I can -- yes, I'm able to turn  
5 up my volume. But yes, she did fade out.

6 JUDGE BELL: Okay, thank you. Any other questions  
7 from the OSHA room?

8 MR. LEVINSON: Yes, Your Honor. Joining us  
9 online, Jason Hammer has a question.

10 MR. HAMMER: Hi, good morning.

11 JUDGE BELL: Go ahead, Mr. Hammer.

12 MR. HAMMER: Hi. Jason Hammer with the  
13 Directorate of Standards and Guidance. Thanks again  
14 for your testimony today, Ms. Klinkam. I also have a  
15 question related to radiant heat and heat-generating  
16 processes. Some commenters in the manufacturing  
17 industry oppose provisions of the proposed rule because  
18 of the heat-generating processes needed for their work.  
19 Can you explain how employers in your industry are  
20 currently controlling for heat exposure, particularly  
21 exposure to radiant heat?

22 MS. KLINKAM: Right. Many of our manufacturers

1 have air handling systems, which they provide --  
2 there's fans in place and air movement requirements in  
3 the press area. Our presses are very large; we're not  
4 talking like a bakery oven. This is -- you know, they  
5 are -- they are several feet, 50 feet, a hundred feet  
6 long. So it's a long area which is generally open  
7 to -- with the doors open to the outside to allow fresh  
8 air in, as well as with fans and air movement going  
9 along. And as well as -- many of our employees  
10 don't -- they're not standing in that facility or in  
11 that area on a consistent basis. They're in and out of  
12 it. It's not something that requires manual pushing  
13 and -- and controlling of the press while it's there.

14 MR. HAMMER: Got it. Thank you for your answer.  
15 That's it for me.

16 MR. LEVINSON: All right. And Your Honor, OSHA's  
17 last question comes from Zoe Petropoulos, who is also  
18 online.

19 MS. PETROPOULOS: Hey. Zoe Petropoulos with the  
20 Directorate of Standards and Guidance and I actually  
21 have a couple questions. In your testimony, you  
22 suggested that OSHA should change the initial trigger

1 from a heat index of 80 to a heat index of 90 and then  
2 the high heat from a heat index of 90 to 100. And I  
3 think you said that 100 is routinely encountered in  
4 southern parts of the country. And my questions  
5 relating to that are, do you have data or evidence to  
6 suggest that these proposed triggers would be  
7 protective of workers, and if so, can you submit that  
8 into your post-hearing comment?

9 JUDGE BELL: Sorry, ma'am, we're not hearing your  
10 answer. Are you muted?

11 MS. KLINKAM: Umm --

12 JUDGE BELL: Go ahead. I can hear you now, Ms.  
13 Klinkam.

14 MS. KLINKAM: Oh you can --

15 JUDGE BELL: Well, nope. You just dropped out  
16 again. Count down for me, please? Nope. We're not  
17 hearing you, Ms. Klinkam. Ms. Klinkam, we're not  
18 hearing you. Are you hearing me?

19 MS. KLINKAM: How about now? Can you hear me now?

20 JUDGE BELL: Very faintly. Nope. Can't hear you  
21 now. Cannot hear you now.

22 MS. KLINKAM: Hello? Can you hear me now?

1 JUDGE BELL: Now I can, yes.

2 MS. KLINKAM: Very interesting. Volume, system  
3 settings -- let's try this.

4 JUDGE BELL: Okay. Do you remember the question?

5 MS. KLINKAM: Okay. Can you hear me now?

6 JUDGE BELL: Yes. Nope, now we cannot hear you  
7 again. Nope, we cannot hear you.

8 MS. KLINKAM: Can you hear me now?

9 JUDGE BELL: Still cannot hear you.

10 MR. LEVINSON: Your -- Your Honor there is the  
11 possibility of a phone call option.

12 JUDGE BELL: Ms. Klinkam, are you able to hear me?

13 MS. KLINKAM: Yes.

14 JUDGE BELL: Okay. Now I can barely hear you that  
15 time. Try speaking again, please. Nope, can't hear  
16 you.

17 MS. KLINKAM: No?

18 THE REPORTER: Do you have a headset?

19 MS. KLINKAM: I can try --

20 MS. CARLON: Yeah, let's try the headset. It  
21 sounds like you're there, but very faintly. If the  
22 headset doesn't work, then we can switch to call in.

1 JUDGE BELL: We'll give you a minute to pair up  
2 there.

3 MS. KLINKAM: One second. Okay, how's that?

4 JUDGE BELL: We can hear you, but you're not very  
5 loud.

6 MS. KLINKAM: Hi. That is super interesting.

7 JUDGE BELL: And now, if you're speaking, I can't  
8 hear you at all.

9 MS. KLINKAM: Okay. Well, I'll just talk very  
10 loudly.

11 JUDGE BELL: Okay.

12 MS. KLINKAM: Is that going to work?

13 JUDGE BELL: That's perfect.

14 MS. KLINKAM: Okay.

15 JUDGE BELL: Do you remember the question?

16 MS. KLINKAM: The question was with regard to - it  
17 was with regard to the -- the set points, the  
18 recommendation of the set point change, correct?

19 MS. PETROPOULOS: Yeah. The changes to the  
20 triggers, if you have any data or evidence to suggest  
21 that these would be protective of workers, and if so,  
22 could you share those in your post-hearing comments.

1 MS. KLINKAM: Right. So I wanted to clarify on  
2 that, that we -- it was -- you had stated that we that  
3 we had stated that the 100 degrees is very common. And  
4 it was actually 80 degrees is very common.

5 MS. PETROPOULOS: Thank you for correcting me.

6 MS. KLINKAM: Yeah. So I mean -- but I mean,  
7 also, I don't think -- I can't tell you that 100  
8 degrees is not common because -- you know, especially  
9 this week, right? So anyway -- do I have any evidence  
10 for that? I would have to look for that and find that  
11 evidence. I don't have it on my hand, but I can  
12 certainly provide it for follow-up, absolutely.

13 MS. PETROPOULOS: Thank you. And I have two more  
14 follow-up, if -- if that's okay. So in the scenario  
15 where the triggers were both increased, would you  
16 envision any controls being needed below a heat index  
17 of 90, or would that be the only time where you think  
18 controls would be necessary?

19 MS. KLINKAM: Triggers below 90 -- I don't think  
20 so. Again, I think a lot of this has to do with the  
21 third point that we made is the acclimatization of --  
22 of workers. You know, 80 degrees in North Carolina or

1 South Carolina feels a whole lot different than -- be  
2 given the humidity and all of that. And also, the  
3 employees are so much more used to living and working  
4 in the high heat and the high humidity. So I think  
5 that that's really kind of the crux of the matter that  
6 we really need to look into, what people are used to  
7 and how they are living in, you know, on a regular  
8 basis.

9 MS. PETROPOULOS: Thanks. And that's actually a  
10 good segue into my next question. Do you have data or  
11 evidence to support this -- this -- this claim of,  
12 like, natural acclimatization among employees? Do you  
13 have any data among your member employees' workforce?  
14 And if you do have any data or evidence, if you could  
15 submit that in your post-hearing comments, we would  
16 appreciate seeing that.

17 MS. KLINKAM: Yeah, let me look into that. I'll  
18 make a note to find the data and evidence for the --  
19 the set points as well as the -- the acclimatization.  
20 Absolutely.

21 MS. PETROPOULOS: Thank you so much. And thanks  
22 for your patience. I know I had a lot there at the



1 end.

2 MS. KLINKAM: Well, I'm sorry that I had technical  
3 issues. I don't even know what happened.

4 MS. PETROPOULOS: No worries. That's it for me.

5 MR. LEVINSON: Your Honor, that concludes OSHA's  
6 questions. Your Honor, we're not hearing you.

7 JUDGE BELL: That's because I pressed the mute  
8 button. Questions from the Solicitor?

9 MS. LEVIN: Jennifer Levin for the Solicitor's  
10 Office. No questions from me, Your Honor. Thank you  
11 very much to the witness.

12 JUDGE BELL: All right. Do we have other  
13 questions for Ms. Klinkam?

14 MS. CARLON: There are no other questions from  
15 online participants, Your Honor.

16 JUDGE BELL: All right. Ms. Klinkam, thank you  
17 very much for your testimony. And thank you for your  
18 grace under pressure and getting your headset working.  
19 I'm not sure I would have been able to do that, so  
20 thanks very much.

21 MS. KLINKAM: Thank you.

22 JUDGE BELL: Okay. Bye-bye.

1 MS. KLINKAM: Bye.

2 MS. CARLON: The next speaker is Dustin Hollis.

3 Please state your name and affiliation for the record.

4 MR. HOLLIS: My name is Dustin Hollis, and I am  
5 affiliated with the National Marine Manufacturers  
6 Association.

7 JUDGE BELL: Go ahead, sir.

8 MR. HOLLIS: Okay. Well, first off, we appreciate  
9 this opportunity. As I said before, my name is Dustin  
10 Hollis, and I'm working -- responsible for the  
11 manufacturing facility at Grady-White Boats, a small  
12 business, based in Greenville, North Carolina. Grady-  
13 White is an iconic American small business boat  
14 builder, and we provide over 450 excellent  
15 manufacturing jobs to the surrounding Greenville area.  
16 And we've been in business since 1959.

17 Recreational boat building, as a whole, is  
18 uniquely an American industry, providing a \$230 billion  
19 impact on our nation's economy, supporting more than  
20 812,000 jobs and 36,000 businesses across the nation.  
21 In fact, 95 percent of boats sold in the United States  
22 are built in the United States. There are over 3000

1 recreational boat builders in the United States, most  
2 of which are small businesses. And recreational boat  
3 building, is truly a uniquely American and an industry  
4 that is an example of made in America.

5 Recreational marine manufacturers take the safety  
6 and well-being of our workers very seriously. As  
7 mentioned, many of the manufacturers are small, U.S.-  
8 based businesses building a variety of recreational  
9 boats. This includes small aluminum boats, pontoon  
10 boats, ski boats, day cruisers, personal watercraft,  
11 propulsion systems, all types of other boats, and of  
12 course, off shore fishing boats that are part of an  
13 iconic American pastime.

14 So we support a safe work environment, but have  
15 serious concerns and oppose the implementation of a  
16 broad, non-industry-specific rule that would set  
17 universal heat trigger levels, acclimatization  
18 processes, and recordkeeping requirements across very  
19 different industry sectors. The OSHA statistics for  
20 heat-related injuries and fatalities for the  
21 recreational boat manufacturing industry do not support  
22 a rulemaking. I'm going to say that again. The OSHA

1 statistics for heat-related injuries and fatalities for  
2 recreational boat manufacturing industry do not support  
3 a rulemaking.

4 Recreational boat building is already highly  
5 regulated in the United States. OSHA specifically  
6 regulates permissible exposure limits, personal  
7 protective equipment, ventilation requirements, EPA  
8 title III boat NESHAP, EPA title V air permits, RCRA,  
9 and other comprehensive compliance tracking and  
10 monitoring requirements. We are small businesses and  
11 most of us do not have only a -- some of us only build  
12 a handful of boats a year. And we don't have great big  
13 teams of compliance, regulatory, and legal and  
14 administrative folks that can deal with the disruptive  
15 and unnecessary regulatory burden that this proposed  
16 heat standard would entail. It's the same set of  
17 requirements when you work in a library or foundry, and  
18 there's huge differences in the type of work that's  
19 being done.

20 So an example of another issue we have is, say we  
21 have an employee named Bob that is going on vacation in  
22 July. Bob works in NC, at our facility, and he wants

1 to go to Miami Beach to drink some mojitos and go  
2 boating. Bob's wife wants to go on an Alaskan cruise.  
3 Bob's vacation decision has a profound impact on our  
4 business. If he chooses to go Miami, there's no issue  
5 for us. However, if Bob goes to Alaska, we need to  
6 implement an acclimatization process when he returns.  
7 What business is it of ours where Bob goes on vacation?  
8 How is it even -- how are we even supposed to track  
9 that as a small business? And is it even legal or  
10 appropriate for us to track that and inquire that of  
11 our employees?

12 And then also, how are we supposed to track and  
13 implement daily wet bulb temperature criteria, which in  
14 North Carolina can change multiple times a day? We'd  
15 be spending all of our time tracking and implementing  
16 heat action periods, basically all summer long. And  
17 I'm not sure we'd be even able to produce any boats.  
18 This type of stuff sounds good on paper, but it has an  
19 unrealistic impact on our businesses. And like I  
20 reiterated previously, the OSHA statistics for heat-  
21 related injuries and fatalities for the recreational  
22 boat manufacturing industry do not support a

1 rulemaking.

2 We do take the safety and well-being of our  
3 employees seriously. As most boat builders are small  
4 businesses, our employees are our family, and we work  
5 together in a safe, productive manner to produce  
6 excellent, handmade recreational boats. This is  
7 essentially a craft industry. Workers at boat plants  
8 are provided with sufficient hydration, breaks, and  
9 work schedules so that they can perform their job in a  
10 safe and comfortable manner.

11 Furthermore, most boat plants already require  
12 significant direct air changes throughout the day to  
13 meet OSHA permissible exposure limits. These air  
14 changes throughout the use of large outside air makeup  
15 units provide a cooling effect within the manufacturing  
16 plant. The proposed OSHA regulation does nothing to  
17 improve the safety of workers, but rather creates an  
18 administrative burden on an industry sector that  
19 manages heat in a safe manner and does not have a  
20 record of heat-related injuries or fatalities.

21 So once again, just thank you for the opportunity  
22 to testify today on behalf of the recreational boating

1 industry, Grady-White boats, and the National Marine  
2 Manufacturers Association. We look forward to  
3 continuing this dialogue with OSHA.

4 JUDGE BELL: Mr. Hollis, thank you very much.  
5 Questions for the witness from the OSHA room?

6 MR. LEVINSON: Yes, Your Honor. Andrew Levinson  
7 for OSHA. Our first question comes from Grace here in  
8 the room.

9 MS. SHIN: Hi. This is Joo-Hyung Shin from OSHA.  
10 In your submitted comments -- when you submitted  
11 comments by your association --

12 THE REPORTER: And I'm sorry --

13 JUDGE BELL: I'm sorry we're not able to hear the  
14 question.

15 MR. HOLLIS: Yeah. I'm struggling.

16 MS. LEVIN: Try to project your voice more.  
17 The --- the mic is -- is connected to the camera.

18 MS. SHIN: Oh, all right. Sorry, my apologies. I  
19 will -- this is Joo-Hyung Shin from OSHA. In the  
20 submitted comments by your association --

21 MR. HOLLIS: Yes.

22 MS. SHIN: Comments mentioned that, during warmer

1 months, outside air is applied to the manufacturing  
2 facility, which provides a cooling effect which also  
3 could be subject to wide variations in temperature and  
4 humidity. Can you elaborate how large this cooling  
5 effect is? Like does it mean that it keeps the  
6 temperatures within the facility 90, or below 90, is it  
7 below 80? Can you provide more specifics on that  
8 cooling effect?

9 MR. HOLLIS: Yes. So you know, we're using  
10 evaporative cooling units and it's a technology that  
11 the less humidity you have, the better it works.  
12 Typically what you'll see is a 10 to 12, 15 degree  
13 cooling difference from the outside air temp to the  
14 inside air temp.

15 MS. SHIN: Thank you. My last question is the  
16 general theme in the comments is about the variations  
17 in temperatures within your facilities that are subject  
18 to outdoor conditions. So we were curious if you have  
19 additional data that you could provide on how indoor  
20 conditions of your facilities relate to outdoor  
21 conditions. So for example, is there a quantitative  
22 relationship like if the outdoor heat index is some



1 degrees, then indoor heat index is like higher or lower  
2 by x amount? I think you did speak to that like right  
3 before, but if you have any like detailed data that  
4 could speak to that relationship between indoors and  
5 outdoors, OSHA would find that very helpful. Thank  
6 you.

7 MR. HOLLIS: We could -- we could provide data to  
8 that effect. I think part of the problem with that is,  
9 is you have thousands of boat manufacturers across this  
10 country that our data is not going to be the same as  
11 somebody else's data. And the big problem is -- is  
12 also coming from OSHA regulations with the permissible  
13 exposure limits. I mean, we're turning the air over in  
14 that part of the building multiple times a minute.  
15 That -- that makes it pretty hard to cool it to an  
16 extent. But yes, we could provide that data.

17 MS. SHIN: Thank you.

18 JUDGE BELL: Other OSHA questions?

19 MR. LEVINSON: Yes, Your Honor. Our next question  
20 comes from Tiffany DeFoe, who is joining us online.

21 MS. DEFOE: Hi. For the record, this is Tiffany  
22 DeFoe with the Directorate of Standards and Guidance,

1 OSHA. So in your written comments, and then again in  
2 your testimony, you emphasized that workers at your  
3 plants -- or the association's plants, that is -- are  
4 provided with sufficient hydration, breaks, and work  
5 schedules so that they can perform their job in a safe  
6 and comfortable manner. And we appreciate that  
7 commentary and I just wonder if it's possible to  
8 provide some more detailed information, either now or  
9 to the record in post-hearing comments, that would help  
10 us understand how rest breaks are currently provided to  
11 workers in the industry. For example, like whether  
12 they're built into the schedules in advance, provided  
13 at workers' requests when they feel at risk of  
14 overheating or any combination.

15 MR. HOLLIS: Sure.

16 MS. DEFOE: Thank you.

17 MR. HOLLIS: So let's start with the hydration  
18 aspect. I mean, we have -- we go through pallets of  
19 water a week at our facility. We have all kind of  
20 Gatorade mixes, ice pops, anything we can do to keep  
21 people cool, fans, air-conditioned break rooms. There  
22 are set breaks that are scheduled in, but I don't know

1       how many of you ever -- how familiar you all are with  
2       boat building, but you kind of do it one boat at a  
3       time, at least within a team. And so that team is --  
4       regularly takes breaks in between boats, especially  
5       when it's hot. If anyone ever feels like they're  
6       getting too hot, we -- we take breaks all the time, if  
7       that happens, I mean, there's no -- there would be no  
8       issue there. It rarely happens, but normally, you  
9       know, you finish your boat, you take a break before you  
10      go to your next boat. And then, I mean, it's pretty --  
11      pretty flexible work hours within that schedule, as  
12      you -- you're jumping from boat to boat. Does that  
13      answer your question?

14           MS. DEFOE: Yes. I have maybe one follow-up,  
15      which is just whether there's any information about  
16      other processes? We've heard from other commenters  
17      that sometimes their industry involves processes that  
18      can extend for hours at a time and don't lend  
19      themselves to taking -- taking breaks for rest or  
20      hydration during that process. So if there are  
21      processes like that in your industry, any information  
22      you can provide about what they are, how long they

1 last, and how your industry would accommodate or does  
2 accommodate a worker's need for a rest break during  
3 that kind of process if it comes up?

4 MR. HOLLIS: There are processes that, as a whole,  
5 can take hours. If you're laying up a side of a big  
6 hull or something like that. But like I say, it's a  
7 team effort. It's not -- you're -- you're one person  
8 and you're stuck in this spot for four hours and if you  
9 take a break, you're fired. It's -- the work can still  
10 be done, cycling people in and out. It's not a -- it's  
11 not one person specific to the work, if that makes  
12 sense.

13 MS. DEFOE: It does. Thank you so much. And  
14 that's all I have.

15 JUDGE BELL: Other questions from OSHA?

16 MR. LEVINSON: No, Your Honor. That concludes  
17 OSHA's questions.

18 JUDGE BELL: Thank you. How about from the  
19 Solicitor?

20 MS. LEVIN: Jennifer Levin, for the Solicitor's  
21 Office. No questions for this witness. Thank you.

22 JUDGE BELL: Are there other questions for this

1 witness?

2 MS. CARLON: There are no other questions, Your  
3 Honor.

4 JUDGE BELL: All right. Mr. Hollis, thanks very  
5 much.

6 MR. HOLLIS: Thank you all.

7 JUDGE BELL: And thanks for making a great boat.

8 MR. HOLLIS: Yes, sir, we do.

9 JUDGE BELL: Okay, thank you.

10 MR. HOLLIS: Yes, sir. Bye-bye.

11 MS. CARLON: The next speaker is Lawrence Ryan.  
12 Please state your name and affiliation for the record.

13 MR. RYAN: This is Lawrence Ryan, and my  
14 affiliation is the Virginia Ship Repair Association.

15 JUDGE BELL: Go ahead, sir.

16 MR. RYAN: All right. Thank you. The Virginia  
17 Ship Repair Association is a regional industry  
18 association representing companies engaged in or  
19 supporting ship repair in Virginia and the Mid-Atlantic  
20 region. The mission is to focus and coordinate member  
21 resources on the issues, challenges, and opportunities  
22 facing our industry. We currently have over 330 member

1 companies in the association; that's whom I'm  
2 representing. We work on everything from Navy warships  
3 to the tugs that move them around the Elizabeth River  
4 and the Chesapeake Bay, to the barges that go up and  
5 down the Atlantic seaboard, and any infrastructure such  
6 as piers, bridges, cranes, wharfs, and the labor pools  
7 that work within that industry. It is a complicated,  
8 multi-employer work environment.

9 I thought this was going to be a tough week to  
10 present to an OSHA public forum, battling restrictive  
11 guidelines that do not factor in regional differences.  
12 This heat wave is actually going to support my  
13 discussion points. It was hot in Virginia yesterday.  
14 We measured 110 relative heat index on the pier, which  
15 was outside, of course. We put our message alerts out  
16 to the workforce of the heat hazards, we assessed our  
17 work areas continuously, we shut down work locations  
18 that could not meet our mitigation plans, and we  
19 shifted workforce to cooler times of the day and night  
20 throughout this hot week. For us, just another 90 plus  
21 degree temperature day in Hampton Roads. No one had a  
22 heat-related incident at our numerous work areas --

1 knock on wood.

2 We already follow a General Duty Clause that  
3 requires us to have safe and healthful work  
4 environments. We are required to assess for all  
5 hazards and execute mitigations to keep our workforce  
6 as safe as possible. As an examples, we have safety  
7 plans for heat hazards, just like we do for the cold  
8 weather plans in the winter and heavy storm weather  
9 plans most of the year. We assess both inside and  
10 outside work areas during these periods of high heat,  
11 and ensure mitigations are in place to allow work to  
12 continue or plans to shut down work when we cannot.

13 We have numerous mitigations in place; water, ice,  
14 electrolyte drinks, popsicles, environmentally  
15 controlled areas and cooling stations, work/rest  
16 cycles. And for at-risk events, where work just has to  
17 get done despite the hazards, we add safety briefs and  
18 we come up with mitigations to allow that to happen.

19 We provide training to the workforce on heat  
20 hazards and the signs and symptoms of what a heat  
21 illness might look like. And we provide training  
22 individually to the supervisors to assess for signs of

1 heat stress in their teams and how to trigger an  
2 incident response.

3 And lastly, we provide continual supervision in  
4 the form of managers, supervisors, and safety  
5 inspectors out in the work areas. None of these were  
6 created because of a new guideline that needs to come  
7 out. It's because we've been repairing ships since  
8 1775 in this region, and it's always been hot. And so  
9 we have these factored into the way we do business.

10 Our concerns with the guidelines is that you do  
11 not factor in the regional differences. Our populace  
12 is acclimatized to a higher temperature, where 80  
13 degrees is a low hazard day, a great day to mow the  
14 lawn and to work outside. We are concerned that these  
15 proposed guidelines will create regionally-based  
16 business disadvantages by increasing cost and time to  
17 perform work in our region. And that will affect our  
18 ability to earn contracts and continue business. Thank  
19 you for the opportunity to speak to this public forum.  
20 I stand by for questions.

21 JUDGE BELL: Thank you, Mr. Ryan. Questions from  
22 the OSHA room?



1 MR. LEVINSON: Yes, Your Honor. Andrew Levinson  
2 for OSHA.

3 MR. RYAN: Yes, sir.

4 MR. LEVINSON: A couple of questions related to  
5 some of your statements that you just made in the -- in  
6 your remarks. You talked about mitigation methods  
7 being implemented when heat hits certain triggers.  
8 What triggers do you use in the Virginia Ship Repair  
9 Association or your personal business?

10 MR. RYAN: Sure, great question. So we currently  
11 have -- and it's even in our -- in our -- in our heat  
12 plan, we use OSHA's -- there's a table that they have  
13 with yellow, orange, and red temperatures ranging from  
14 80 up to -- I usually stop looking after 115 for  
15 relative heat index. But that is what most entities  
16 use to, basically, start looking for the hazards above  
17 80 degrees. 80 degrees around here is half the year,  
18 so until we get to 90 and 100 degrees, we're really not  
19 executing the mitigation plans. So that is the table  
20 that we go off of even though it's not a formalized  
21 heat index measurement. But most people run off of  
22 that and say at -- at the orange and red levels, these

1 are the mitigations that you have to put in place from  
2 your -- your heat plan.

3 MR. LEVINSON: Thank you. Also in your - your  
4 opening remarks, you talked about work/rest cycles  
5 being implemented when you hit heat triggers. What  
6 sort of work/rest cycles do you use in the Virginia  
7 Ship Repair Association?

8 MR. RYAN: Sure. The -- let me -- let me define  
9 one thing first. So in our industry, most of our  
10 workplaces are multi-employer workplaces. My company  
11 has 350 employees. But we run a shipyard, where it  
12 might be 2000 to 3000 people inside of our yard  
13 working, mostly subcontractors, Navy sailors. So  
14 there's a -- there's a wide variety. And so our  
15 requirement is -- we obviously have to protect  
16 everybody, not just our own workplace. The work/rest  
17 cycles are left to the supervisor of that team. You  
18 know, once we hit a certain trigger level above 90  
19 degrees, above 100 degrees we schedule 15-minute breaks  
20 every couple hours. That --

21 THE REPORTER: Excuse me, sir. This is Christine,  
22 the court reporter. You dropped out. You -- you --

1           once you hit what?

2                   MR. RYAN: I'm sorry. So once we hit 90 degrees,  
3           we start putting out to the supervisors that they have  
4           the ability to start work/rest cycles based off of when  
5           a worker needs a break, how long that they've been  
6           working, and based off of their assessment of -- of the  
7           area that they're working in. Some people are working  
8           on the pier where there's a nice breeze coming down the  
9           pier. Some people are working down in the engine room,  
10          seven decks down in the ship, and are not -- are facing  
11          a different temperature for that day.

12                   So the supervisors with meters, safety inspectors  
13          with meters, are evaluating the spaces and determining  
14          how -- how frequently a work/rest cycle has to happen.  
15          It can be -- we've had jobs where we've had to do  
16          fifteen minutes in, fifteen minutes out. But it's  
17          based off of -- of what that measurement is in that  
18          space.

19                   MR. LEVINSON: Thank you, sir. OSHA's next  
20          question comes from Danielle Watson.

21                   MS. WATSON: Hi, this is Danielle Watson with  
22          OSHA. The first question I have is, you had mentioned

1 in your -- a lot of your members have heat safety  
2 plans, and in those, that's where the mitigations are.  
3 I was wondering if you would feel comfortable, in  
4 follow-up comment, to submit some example -- a couple  
5 example plans, so we could see maybe some of the other  
6 additional mitigation, other than what you mentioned in  
7 your verbal testimony.

8 MR. RYAN: Yes, absolutely.

9 MS. WATSON: Okay, great. Thank you so much. I  
10 just - I just had one more question and it's regarding  
11 the heat injury and illness prevention plan and dealing  
12 with vapor impermeable clothing. And we - the panel  
13 was just wondering what could OSHA do to make the heat  
14 injury illness prevention plan requirements,  
15 specifically in the evaluation of vapor impermeable -  
16 impermeable clothing, more in line with what your  
17 members existing efforts fall.

18 MR. RYAN: Yeah, that's a tough one right there.  
19 So several of our trades, they are consistently, daily  
20 in Tyvek suits -- not to use a manufacturer, but -- but  
21 those types of things for anybody who's in painting,  
22 anybody who's in coatings department, anybody who's

1        working around any HAZMAT, they're going to be in  
2        those. And so that that increases the risk of that  
3        employee. They're going to need additional training,  
4        they're going to need their supervisors to have  
5        additional training, their work/rest cycles are going  
6        to have to increase so they can step away from whatever  
7        area that they're at.

8                But for the most part, the water, ice, cooling,  
9        rest cycles still apply. It's just they're wearing a  
10       piece of PPE that is more restrictive and not going to  
11       allow them to sweat and cool from that -- the  
12       evaporative technique. I don't know if that answers  
13       the question. I just -- it -- it -- that -- that  
14       specific PPE type, wearing face mask, wearing  
15       respirators as well, increases the attention to pulling  
16       those people out of that work environment, giving them  
17       a chance to cool down and then allowing them to go back  
18       in.

19               MS. WATSON: Thank you. No further questions.

20               MR. RYAN: I -- actually can I add one thing to  
21       that? I apologize. It has to be said that the worker  
22       has to be empowered to be able to say, I need a break.

1 And at our companies -- not only at my company, but all  
2 the companies that belong, we really do try to promote  
3 that empowerment. When they say that they've had  
4 enough or when they say that they need a break, I can't  
5 think of any incidents where we said no or -- or -- or  
6 restricted them from doing that. We have to give the  
7 workers the chance and the empowerment to say,  
8 basically, stop and we give them that opportunity.

9 JUDGE BELL: Additional questions from OSHA?

10 MR. LEVINSON: Yeah. Your Honor, actually, I  
11 wanted to ask a follow-up question.

12 MR. RYAN: Yes, sir.

13 MR. LEVINSON: It relates to a comment that you  
14 made earlier about, you know, sometimes somebody's on  
15 the pier and sometimes somebody is seven decks below in  
16 the engine room. How do break schedules work for that  
17 person who is seven decks below in the engine room,  
18 when the outside temperature might be 100 degrees?  
19 And -- and what sort of -- you had mentioned earlier,  
20 like fifteen minutes every couple of hours. What does  
21 a break schedule look like for somebody in the engine  
22 room?

1           MR. RYAN: The first thing we're going to do when  
2           working in -- in an engine room is ventilation. We --  
3           we -- a lot of the complexity to our industry is that  
4           we're shutting these ships off or shutting them down to  
5           work on them, so they may not have standard running AC  
6           units and ventilation units. So we have to provide  
7           temporary ventilation units, temporary AC. And we're  
8           specifically trying to target those areas where, one,  
9           there isn't as much ventilation like the engine room.

10           The second part to that is we're going to  
11           establish cooling stations, not only on the ship -- you  
12           know, we're going to provide that temporary AC into  
13           certain areas, but we're going to let them know where  
14           those areas are. And lastly, the ship -- to get out of  
15           an engine room, particularly on a large warship or a  
16           large commercial ship, it is a little bit of a hike,  
17           but it's not -- it's not so -- it's not like a 20-story  
18           building where you're climbing 20 flights of stairs.  
19           We -- we cut temporary access cuts in decks and put in  
20           staging, and we create pathways for them to get out of  
21           the -- the more complicated confined spaces to areas  
22           where that they can get rest and recuperation.

1 MR. LEVINSON: Thank you. The next question from  
2 OSHA, Your Honor, comes from Brenda Finter, who is  
3 joining us online.

4 JUDGE BELL: Go ahead, Ms. Finter.

5 MS. FINTER: Hello. I just have a couple of  
6 questions for you. First of all, what types of  
7 controls should be required for your industry?

8 MR. RYAN: What type of controls should be  
9 required for my industry? I'm a big fan of the General  
10 Duty Clause, which provides all controls. My only  
11 metric is no injuries, no recordable injuries. So if  
12 I'm meeting that requirement, I'm creating a safe and  
13 healthful work environment, then I've put the controls  
14 in place in which to create that.

15 I don't know how to define what degree of  
16 temperature is a hazard and which degree is not. Is 79  
17 degrees not a hazard, but 80 degrees is? I know from  
18 this region here, that's when we go outside and golf  
19 and mow lawns and exercise, at 80 degrees. So it  
20 doesn't seem reasonable to place on businesses and  
21 industry -- now you got to put in these mitigations at  
22 a temperature where we're all acclimatized, the whole



1       populace is acclimatized to that temperature. But I  
2       don't -- I don't have any data or resources that says  
3       90 degrees is now a hazard, 100 degrees is now a  
4       hazard.

5               I'm asking, is that there be some flexibility and  
6       some regional difference consideration. We've been hot  
7       here for a long time. It's worse south of us, and  
8       they've still been able to do business and still been  
9       able to -- to build and repair ships through that. I  
10      don't -- I don't know how to set what controls are in  
11      place, other than what we've presented here.

12             There is oversight from OSHA. There is oversight  
13      from the Navy and from our regulatory bodies that are  
14      contracting us to work on these ships, piers, and --  
15      and infrastructure. There are requirements for us to  
16      have mitigations in place so that our workforce likes  
17      to work for us and -- and feels safe working for us.  
18      But I don't have a dataset on what controls should be  
19      in place.

20             MS. FINTER: Would you be willing to go back to  
21      your members and ask them what they are using right  
22      now?

1           MR. RYAN: Yes, I think I'll ask for several of  
2           them to provide what their safety plans are. And  
3           within those safety plans will be what they're using as  
4           metrics or -- or controls within there. Does that make  
5           sense?

6           MS. FINTER: Yes, that makes sense. Thank you,  
7           Mr. Ryan.

8           MR. RYAN: Yes.

9           MR. FINTER: Okay. My last question is, is there  
10          a reason why portable shade structures could not be  
11          provided for workers in your industry?

12          MR. RYAN: I guess the short answer to that is no,  
13          there's no restriction -- there's no answer to you that  
14          would restrict the use of portable shade structures,  
15          except for a lot of our outside exterior work -- I  
16          wasn't ready for that question, I apologize.

17          MS. FINTER: That's okay.

18          MR. RYAN: No. So again, I kind of have to define  
19          the industry a bit. So a lot of our work is varied  
20          inside facilities and warehouses, on the pier, on the  
21          ship outside, weather decks, flight decks, hangar  
22          decks, and then a lot of the work is also inside the

1 ship, which is more like working inside of an office  
2 building, just made of steel. We use temporary and  
3 portable structures to provide environmental control.

4 So if you ever see a ship on the water or in a  
5 pier being worked on, you'll see it wrapped in white  
6 plastic, wrapped around staging or wrapped around the  
7 mast, or even the entire flight deck covered over. And  
8 that is done to, one, mitigate environmental exposure  
9 so that the dust and debris is not going into the water  
10 or out into the air. But it also provides us the  
11 opportunity to provide temporary -- temporary  
12 ventilation and AC into those exterior spaces and  
13 provide the shade that that will lower the temperature.  
14 It does prevent wind movement; it does prevent breeze,  
15 but we provide that temporary ventilation into those  
16 spaces so that they can remain cool.

17 We have no restrictions, and -- and we've used  
18 temporary, you know, structures to provide shade, both  
19 outside in our lunch areas, outside on the pier for  
20 people standing duty or watch at the pier. So they're  
21 in use. I have no restrictions to their use.

22 MS. FINTER: Okay. Thank you, Mr. Ryan. That's

1 all I had.

2 MR. LEVINSON: And Your Honor, the last questions  
3 from OSHA come from Grace, here in the room.

4 MS. SHIN: Hi, this is Joo-Hyung Shin from OSHA.

5 MR. RYAN: Yes.

6 MS. SHIN: I have a question about weather and  
7 monitoring. Can you elaborate more on how weather  
8 conditions are currently monitored in the industry?  
9 And also, what general patterns exist in the  
10 relationship between outdoor and indoor temperatures  
11 for your industry?

12 MR. RYAN: Oh, yes. So weather conditions are  
13 monitored daily by project managers at -- at any of the  
14 companies that we work for, because the weather  
15 conditions are going to shift what work can be  
16 accomplished. As examples, a lot of our work might be  
17 out on weather decks or flight decks, outside sections  
18 of a ship. And if it's raining or storming that day,  
19 it's not a very good time to accomplish those repairs.  
20 Cut into the steel, create holes, and now it's leaking  
21 inside the ship, as an example. So weather conditions  
22 are monitored every day.

1           Additionally, wind -- we use a lot of cranes for  
2           moving equipment and material on and off ships. So at  
3           certain wind conditions, we can't operate the cranes.  
4           We can't -- we have to take down staging or scaffolding  
5           above a certain wind speed. So we're continuously,  
6           daily monitoring weather conditions.

7           That -- that in and of itself is triggering us to  
8           look for temperature spikes or temperature changes that  
9           are coming down 10 days from now, so we can start  
10          preparing the workforce for -- this week's going to be  
11          really hot -- reminder of these mitigations, reminder  
12          of these response plans, reminder of these things as we  
13          do that. There was a second part to your question. I  
14          think I've lost it in my head.

15          MS. SHIN: Yes. This is Joo-Hyung Shin from OSHA  
16          again.

17          MR. RYAN: Yes.

18          MS. SHIN: Just in your experience and your  
19          observation, what -- how does the relationship between  
20          outdoor and indoor temperatures look like for industry?

21          MR. RYAN: Yeah, it's a good question because in  
22          our industry, outdoor temperature and indoor

1 temperature can vary dramatically. The ships that  
2 we're working on, the facilities, the warehouses, and  
3 the fabrication facilities we're working in can all be  
4 varied points. The pier, while it may be hot outside,  
5 often has a really nice breeze coming in from the  
6 water. And so that -- that cooling effect, that  
7 evaporative effect, can make a pier very comfortable.  
8 But inside the ship, you're talking about watertight,  
9 airtight, steel structures. If there's no movement of  
10 air, they can become ovens. So the temperatures  
11 inside, the deeper down you go inside the tanks, inside  
12 the engine rooms can -- can exceed dramatically the  
13 outside air temperature.

14 We don't use just the -- so the air temperature or  
15 the weather conditions -- you know, if we're looking at  
16 the Weather Channel, we're tracking, you know, this is  
17 what the heat index is predicted to be for the next 10  
18 days. We're putting into the hands of our safety  
19 inspectors, our managers, and any supervisor that --  
20 that that is in an at-risk zone -- we're putting in  
21 their hands meters, so that they're able to check their  
22 spaces wherever they're at within the ship, because

1       it's not necessarily going to match what we're seeing  
2       outside.

3             It may be cool outside; there may be hotter  
4       temperatures inside the ship. We're doing hot work,  
5       we're plasma cutting, we're carbon arcing, we're  
6       welding and so those spaces may be increasing in  
7       temperature simply because of the work that's being  
8       accomplished. And -- and they have to be evaluated  
9       differently and separately. That's why they get those  
10      meters, so that we can make a space decision on whether  
11      or not to shut down work just in that space.

12            MS. SHIN: Thank you.

13            MR. RYAN: Thank you.

14            JUDGE BELL: Other questions from OSHA?

15            MR. LEVINSON: No, Your Honor. That concludes  
16      OSHA's questions.

17            JUDGE BELL: Thank you. From the Solicitor's  
18      Office?

19            MS. LEVIN: Jennifer Levin from the Solicitor's  
20      Office. No questions for me, thank you very much.  
21      Appreciate the witness's time and testimony.

22            JUDGE BELL: Are there other questions for this

1 witness?

2 MS. CARLON: Yes, Your Honor, we have one from Mr.  
3 Barab. Please state your name for the record.

4 MR. BARAB: Yeah, hi. My name is Jordan Barab.  
5 Mr. Ryan, I actually enjoyed your -- your testimony and  
6 all you're doing to protect workers from heat. And in  
7 fact, I've -- I found that from a number of the  
8 business associations that are testifying, they're  
9 already doing a lot. But the question that it raises  
10 for me is, especially for the low heat trigger, the  
11 initial heat trigger -- what the problem is? It seems  
12 to me, listening to your testimony, you're pretty much  
13 doing everything that is -- would be required by the --  
14 by the standard. So what is it specifically -- and  
15 again, right now I'm talking about the -- the initial  
16 heat trigger.

17 MR. RYAN: Sure.

18 MR. BARAB: What is it, exactly, where that would  
19 provide some kind of burden on your -- on your  
20 operation that you wouldn't be able to fulfill?

21 MR. RYAN: Yeah. I had that thought as I was  
22 preparing that. I said, man, I'm starting to sound



1       like I'm making the other argument. We're already  
2       doing a lot of the features. And I think that's kind  
3       of what we wanted to present is not so much a  
4       complaint, but -- but we're doing so many things.

5               Lines in the sand, fixed metrics, fixed numbers  
6       make it very complicated to -- for us to use our  
7       training, our experience, particularly in my specific  
8       industry, which I'm knowledgeable at, in another  
9       industry which has different features -- to be able to  
10      continue to do their work around that line in the sand.  
11      I think what we're concerned about is -- 80 degrees,  
12      when most people are outside in this area, I now have  
13      to put in parameters that I normally wouldn't be  
14      putting in at 80 degrees, that I might be putting in at  
15      90 degrees instead. But now I've got a 10 degree  
16      window, probably another three to four months of time  
17      within this region where I've got to shift down some of  
18      my current mitigations.

19             MR. BARAB: What -- what specifically? I mean,  
20      basically, the initial heat trigger, basically, says  
21      provide water, rest, and shade as -- rest and shade as  
22      needed. I mean, again, everything -- it seems like

1           you're already doing everything anyway because the --

2           MR. RYAN: The -- the acclimatization one scares  
3           us. I can use that word, I think. I mean, you know,  
4           having to ratchet a person back into the workspace even  
5           though they've been in this area for how long, is a  
6           cost. You know, I've got to pay for that person to be  
7           in a non-work position after they've been out of work,  
8           or if they're just starting work. We do already have a  
9           lot of the features where they're going through  
10          training when they first start with us, so they're sort  
11          of acclimating into our -- our -- work -- workspace.  
12          But -- but for our own workers, they go away on a  
13          vacation and then they come back and I've got to lose a  
14          week of productivity out of them is -- is -- is a  
15          worry.

16                I think it also -- it puts a rigid standard that  
17                says a person was injured, got a recordable injury, and  
18                it was 82 degrees out there. So clearly, you didn't  
19                provide the necessary mitigations to protect that  
20                worker. I don't face that right now because I don't  
21                have an 80-degree metric that I have to meet. So I  
22                think we're nervous about just these rigid PELs that --

1           that, that maybe take away our ability to use our  
2           judgment based on our experience and our industry.

3           MR. BARAB:   Okay.   Thank you.

4           MR. RYAN:    Yep.

5           JUDGE BELL:   Any other questions for Mr. Ryan?

6           MS. CARLON:   There are not, Your Honor.

7           JUDGE BELL:   Mr. Ryan, thank you very much for  
8           your testimony.

9           MR. RYAN:    Thank you.

10          JUDGE BELL:   We appreciate it very much.

11          MS. CARLON:   The next speaker is Jim Nelson.

12          Please state your name and affiliation for the record.

13          MR. NELSON:   Jim Nelson with LBT.

14          JUDGE BELL:   Mr. Nelson, go ahead please.

15          MR. NELSON:   Thank you for allowing me to testify  
16          today.   LBT is a tank trailer manufacturer located in  
17          Omaha, Nebraska, employing just over a hundred people.  
18          LBT understands the need to protect workers from  
19          exposure to heat.   We have had an effective heat  
20          program for several years.   We provided both written  
21          and oral feedback during the SBREFA panels as well as  
22          written comments during the comment period.   We

1 continue to have some serious concerns regarding the  
2 current proposed rule, especially how it will impact  
3 smaller businesses.

4 Three of the items I'm going to highlight are,  
5 one, indoor heat measurements. We have concerns  
6 regarding the monitoring requirements for indoors. We  
7 have multiple cells where the tasks will vary daily,  
8 including what, if any, time spent within a trailer,  
9 may or may not be welding, how much welding is being  
10 done on the exterior and where on the trailer, as well  
11 as many other factors. As proposed, trying to measure  
12 as close as possible to the worker is impractical with  
13 all this variability. Personal monitors would be cost  
14 prohibitive, as would be man -- as trying to manage  
15 also the web-based system, with all the employees doing  
16 all these -- all the different tasks and everything.

17 We typically see the heat index in the plant above  
18 80 degrees for about three to five months during the  
19 year, for at least two hours of a given work shift.  
20 However, we may occasionally experience, you know,  
21 periods over 80 all day long, as well as some days that  
22 may end up above 100 or even 104 by 3:00 p.m., which is

1 normal end of shift. So we do run some overtime after  
2 3:00, but that is voluntary and variable. Typically in  
3 the summer we're between about 85 and 97 heat index  
4 within the plant. We currently have three monitors  
5 that we use to monitor temperature and humidity. They  
6 send their message -- their data wirelessly to our  
7 first aid room, where we can compare to -- the results  
8 to a chart to get the heat index. And then we base our  
9 actions on those results and a table that we have built  
10 with our controls.

11 Breaks are another concern. We understand the  
12 need for additional breaks in the heat. We already  
13 currently allow employees, as-needed, to take short  
14 breaks to get water, refill water, et cetera or as-  
15 needed to stand in front of a fan or a Portacool for a  
16 couple of minutes, especially if their areas do not  
17 allow for readily -- more direct fan use. Around  
18 welding, obviously that is a concern. Having too much  
19 air movement creates issues.

20 Our concerns are on the mandatory 15-minute break  
21 every two hours. It can cause additional disruptions,  
22 beyond what we already have scheduled, if we have to

1       add them. Due to -- well, we try to maintain as -- you  
2       know, welds as long as possible. The more we interrupt  
3       welds, the more likelihood you have of issues. And  
4       these are DOT coded vessels, so we want to minimize  
5       starting and stopping. Also, can play havoc around --  
6       say if we are running overtime -- trying to manage a  
7       break within that, et cetera.

8               The other concern is the potential for abuse of  
9       the as-needed. We concern -- the rule as written is  
10      employees can -- could abuse the as-needed as it  
11      relates to breaks approaching, potentially up to  
12      fifteen minutes, above that 80-degree threshold. For  
13      example, plant may reach 80 for most, if not all, days  
14      for the past month, with a break maybe every two hours.  
15      As written, employee could decide to take a 10 to 15-  
16      minute break or more, depending on travel and PPE,  
17      donning and doffing in the middle of that period,  
18      claiming vague heat illness symptoms every single day,  
19      whether needed or not. There's nothing an employer can  
20      do about it.

21              We understand there are workplaces, as noted by  
22      previous testimony of other stakeholders, where

1 employees' access to break, water, et cetera are  
2 extremely limited to nonexistent. But the proposed  
3 rule -- proposed means of addressing this issue in  
4 those locations will potentially create problems for  
5 others. We ask OSHA to consider modifying the language  
6 to prevent blatant abuse of longer as-needed breaks,  
7 while still protecting access to workers who need them.

8 Temperature thresholds. We utilize our own  
9 thresholds based on experience that we have regarding  
10 our own internal heat triggers, and including  
11 restricting forbidding afternoon overtime, prioritizing  
12 morning overtime, limiting interior welding, additional  
13 mini breaks, handing out popsicles, a variety of  
14 different measures we have in place. Our current  
15 thresholds have been effective for several years. And  
16 as noted in multiple testimonies, one-size-fits-all  
17 approach to temperatures is very challenging to  
18 employers.

19 We -- we would ask OSHA to consider increasing the  
20 thresholds. We believe the proposed rule, as written,  
21 will have significant adverse impact on employers. In  
22 closing, we'd like OSHA to consider a more performance-

1 based approach to address these concerns and needs  
2 raised by all those who presented and comment. Thank  
3 you for allowing me to testify today. I'll gladly  
4 answer any questions.

5 JUDGE BELL: Thank you, Mr. Nelson. Questions  
6 from the OSHA room?

7 MR. LEVINSON: Yes, Your Honor. Andrew Levinson  
8 for OSHA. Our first question comes online from Brenda  
9 Finter.

10 MS. FINTER: Hello, Mr. Nelson. My first question  
11 is, can you share with us how you determine when  
12 protective measures are started? You've talked about  
13 triggers, but how do you determine when protective  
14 measures are needed?

15 MR. NELSON: Typically, for us using our -- using  
16 the heat indexes within the -- the facility because we  
17 measure those live, once they reach for us -- assuming  
18 acclimatization, not a sudden heat wave, which we will,  
19 you know, take it as it goes -- starting at 91, we just  
20 do additional monitoring of employees. They're already  
21 able to go get breaks, go stand in front of the fans.  
22 So some of those issues are already there. We hit 95,



1 we do more hydration breaks. We actually go out into  
2 the plant, and -- especially our big window happens  
3 between 1:00 and 3:00, because they get done with lunch  
4 at 1:00, end of shift is 3:00. So about 2:00, once we  
5 hit 95, we will go hand out popsicles to the employees,  
6 encourage them to drink water. We actually get a  
7 chance to interact with, essentially, all the  
8 employees, address how they're doing and seeing how --  
9 what they're doing at that point.

10 And then, if it gets higher than that, we --  
11 again, we limit or we'll have zero overtime. We may --  
12 we have not yet had to close work early, but that is  
13 always on the table. But we had -- we -- at 101, 104,  
14 we'll have additional five-minute mandatory rest breaks  
15 every hour. And if it gets over 105, which I have not  
16 seen yet, we would go to ten-minute hydration rest  
17 breaks every hour. As part of that, again, we have  
18 fans throughout the plant, cooling fans. Our major  
19 interior welding operation, they're supplied air weld  
20 helmets with vortex cooling. So they -- we're  
21 providing cooling to them as well in that area.

22 MS. FINTER: Is there a point where you do

1 additional monitoring, say above a certain trigger?

2 MR. NELSON: Well, above -- above 91, we start to  
3 do additional monitoring of employees by the  
4 supervisors. So we start at 91 degrees, starting to do  
5 them. And if we have anybody we know is especially  
6 sensitive we'll -- we'll keep up on them more. Most  
7 employers are working in teams, so they do already have  
8 a partner with them. They're not doing lone worker, so  
9 they can monitor each other as well.

10 MS. FINTER: Okay. And what does that mean to  
11 do -- for -- what does additional monitoring mean for  
12 you?

13 MR. NELSON: It means for us, checking in on the  
14 employees, going through the worksites, seeing how  
15 they're doing, making sure that they're not, you know,  
16 displaying adverse symptoms. It gives the employee the  
17 opportunity too, to talk to the supervisor if there's  
18 an issue.

19 MS. FINTER: Okay. And you actually answered my  
20 last question in this question. So that's all I have.  
21 Thank you.

22 MR. NELSON: Yeah.

1           MR. LEVINSON: Thank you, Your Honor. The next  
2           set of questions come from Tiffany DeFoe, who is also  
3           joining us online.

4           MS. DEFOE: For the record, Tiffany DeFoe,  
5           Directorate of Standards and Guidance, OSHA. Mr.  
6           Nelson, in the comments that you provided on the  
7           proposed rule and then again in your testimony today,  
8           you expressed your concerns that the proposed  
9           requirements for as-needed rest breaks could be used  
10          inappropriately by employees. Now -- and then also  
11          today, during your testimony, you specifically  
12          mentioned that you believe OSHA should adjust the  
13          language of that requirement. And I'm wondering if,  
14          either now or in post-hearing comments, you could  
15          provide any specific suggestions for how you believe  
16          OSHA could do -- could change that?

17          MR. NELSON: Jim Nelson, LBT. I will look at it  
18          for post-hearing comments. I struggled with how to do  
19          that myself. I was hoping there's some people smarter  
20          than me that could do that. But I will see what I can  
21          come up with in post-hearing comments for the potential  
22          abuse.

1 MS. DEFOE: Yeah. I think it would be wonderful  
2 to have the input of someone who is experienced in the  
3 field, so thank you. And then I wanted to mention  
4 that, earlier in the hearing process, another commenter  
5 raised a similar concern. And their suggestion was  
6 that OSHA should provide non-mandatory guidance, which,  
7 as you're aware, we generally do provide non-mandatory  
8 guidance to accompany rules when we promulgate them.  
9 And that they -- in that guidance, we could give some  
10 discussion around break use that could help provide,  
11 what they termed, guardrails for the use of as-needed  
12 breaks. And I'm wondering if -- again, happy to  
13 receive comments post-hearing if you'd rather -- but  
14 just if your organization or if your if your company  
15 agrees that that could be a helpful aid and any  
16 specific information that you might suggest it would  
17 contain?

18 MR. NELSON: I -- I think that could be a way of  
19 doing it. And I can -- again, I'll try to address that  
20 in the post-hearing comments.

21 MS. DEFOE: Much appreciated, thank you. That's  
22 all I have.

1 JUDGE BELL: Thank you.

2 MR. LEVINSON: Your Honor. The next questions  
3 from OSHA come from in the room, Grace.

4 MS. SHIN: Hi. This is Joo-Hyung Shin from OSHA.  
5 I have two questions. My first question is about  
6 monitoring. In written comments, you say that the cost  
7 of monitoring is underestimated in OSHA's preliminary  
8 economic analysis. Some of the factors that you said  
9 you believe were omitted were restrictions on Bluetooth  
10 line of site, interference with monitors from equipment  
11 like metal trailers, and the need for multiple monitors  
12 within the facility. Could you please elaborate for us  
13 on why you would need to purchase additional monitors  
14 or replace the current system that you have in place  
15 because of the rule?

16 MR. NELSON: Well --

17 MS. SHIN: Yeah. Sorry. I'll stop there. Sorry,  
18 please.

19 MR. NELSON: As you state -- you know, as rule  
20 says, as close as possible and right in the work areas.  
21 That's where it would get challenging, because if we  
22 had to be right in the work area -- and given the

1       variability to -- depending on how OSHA would interpret  
2       it on an inspection, would almost lead to the need to  
3       have monitors on all the employees. Because just  
4       either side of the tank, there'll be a variation  
5       difference because of where ventilation is blowing, et  
6       cetera. Are you on top of a tank, which could be, you  
7       know, 10 foot up in the air or are you on the ground?

8               There's a thermal -- you know, you have, you know,  
9       a couple degrees differential which may or may trigger  
10      somebody into the 80 degree and they're underneath it,  
11      or any of those thresholds. Just in and around the  
12      tank, you could have a couple degree variations -- one  
13      or two degrees. And that's put somebody in or suddenly  
14      they're back out for trying to manage that. Which is  
15      why we went to an area wide with three monitors  
16      representative of areas, to try to manage that, instead  
17      of having to have some sort of monitor on each of the  
18      individuals. And then if they're going into tanks or  
19      they're doing this or whatever they're doing -- and  
20      having to monitor each one individually, which is going  
21      to become challenging.

22              MS. SHIN: Hi, this is Joo-Hyung Shin from OSHA,

1       again. So just a follow-up. So do you believe that  
2       there would be areas that you are not currently  
3       monitoring that you believe will require additional  
4       monitors if -- you know, as proposed?

5           MR. NELSON: Again, as proposed, where it says  
6       monitoring as close as possible to the work area,  
7       that's where we run into defining how -- what are you  
8       saying is as close as. Because my definition could be  
9       different. And so we -- that's why we're using the  
10      three areas to try to give the best representation  
11      across the plant.

12           And if we have to do additional monitoring,  
13      what -- we would have to invest, because right now, we  
14      just are using them based off of a weather station set  
15      up. But if we had to go to integrating it, we looked  
16      at some of the costs of a more formalized system that  
17      reports it all to a web based, et cetera, which  
18      personally we are -- try to limit what all goes in. We  
19      were cyber hacked about three years ago, so any  
20      outside -- outside systems we really don't want to use.  
21      We're trying to limit that ability to have stuff that  
22      goes out to some of the web things or other ways in and

1 out. So that's where we're concerned about costs.  
2 Again, any individual monitors on employees or having  
3 to have significantly others with multiple either base  
4 stations or however we have to try to set that up.

5 MS. SHIN: Thank you. Just like two small  
6 questions about your current monitoring system that I,  
7 think in your comments, they involve a -- a remote  
8 sensor --

9 MR. NELSON: Yes.

10 MS. SHIN: Remote capabilities -- weather stations  
11 with remote sensing capabilities. Could you provide,  
12 now or in post-hearing comments, about specific  
13 estimates of labor burden that is required to do your  
14 current monitoring? Like who is or what job title is  
15 doing the monitoring, how long -- like, how many  
16 minutes does it take to do each measurement, et cetera?

17 MR. NELSON: Right now, it does not take very  
18 long. I -- because the first aid room is right outside  
19 my office, I do the monitoring when I'm here. I can  
20 just step outside, take a look -- or step into the  
21 first aid room, read them right off the display because  
22 it's essentially like a weather station. And just --



1 the chart sits right below it, and I can just go right  
2 between the two and see it. If I want to do a  
3 calculation using one of the online options, it just  
4 takes me an extra minute. So for me to go out there  
5 and look, it takes me 30 seconds to a minute currently,  
6 if that's all I have to do is look at those three.

7 MS. SHIN: Okay. One more question about your  
8 current monitoring system. Does your system happen to  
9 like, log or store measurement data over time?

10 MR. NELSON: If -- that requires me to actually  
11 manually do so. And I've done it a couple of times,  
12 just from a few high heat days in the past to try to  
13 get a curve of -- to see if there's a relationship  
14 between outside and inside. And it's -- we have kind  
15 of a rough correlation on the temperature. Humidity  
16 will eventually even out, but we do have a lag in  
17 temperature. But it varies.

18 In the beginning of the day, we can actually be  
19 hotter than outside from trapped heat until, with the  
20 doors open, it vents. And then we end up, you know,  
21 getting cooler than outdoor. And then we'll, you know,  
22 ramp back up. But we usually stay somewhere behind by

1 the end of the day. It just -- it does vary based on  
2 how much sun, et cetera that, you know, wind,  
3 everything else.

4 MS. SHIN: Thank you. My last question is about  
5 as-needed breaks. So in -- in our preliminary  
6 analysis, we assume that in total as-needed breaks may  
7 increase break time by 10 minutes per day on average.  
8 In your experience, what is your estimate of how much  
9 of your employees' workdays are spent in as-needed  
10 breaks?

11 MR. NELSON: That is a very tough one because we  
12 allow -- we've been pretty flexible, currently, to  
13 allow water, so to go grab water or other things.  
14 So -- and even restroom breaks as-needed. So that's  
15 really a tough one for me to say, whether it's been 10  
16 minutes, 15 minutes, whatever that is. I don't,  
17 myself -- don't get into managing all of that. So I  
18 would -- it is possible it's ten minutes. It may be  
19 more than that. I just don't have a good number.

20 MS. SHIN: Thank you.

21 MR. LEVINSON: And Your Honor, that concludes the  
22 questions from OSHA.

1 JUDGE BELL: Thank you. Solicitors?

2 MS. LEVIN: Jennifer Levin from the Solicitor's  
3 Office. Sir, I believe you mentioned that your -- some  
4 of your employees use cooling PPE in their welding  
5 helmets. Could you elaborate on that? And also  
6 explain what steps you take to ensure that the cooling  
7 properties -- to maintain the cooling properties of  
8 that PPE?

9 MR. NELSON: The -- what we're using is 3M's  
10 vortex cooling system. So that allows them to  
11 essentially drop the -- the air coming into their  
12 supplied air weld helmet by -- I believe it's up to 40  
13 to 50 degrees. And it's -- and it is adjustable. And  
14 trust me, if they notice that it's not working, they're  
15 the first ones to say -- hey, this needs to be repaired  
16 or replaced. So they'll come out and we've got readily  
17 available -- so they -- they know when it's not  
18 working. And that -- they utilize that almost all  
19 year -- all year round, having that ability. Or if  
20 we're in a sandblast hood situation, we have the same  
21 setup for that as well, where they can have that cold  
22 air blowing over the -- the helmet. And if there's any

1 issues, the employees are very quick to let us know  
2 about it.

3 MS. LEVIN: Thank you. No further questions.

4 JUDGE BELL: Any other questions for Mr. Nelson?

5 MS. CARLON: There are not, Your Honor.

6 JUDGE BELL: Mr. Nelson, thanks very much for your  
7 testimony today. It's been very helpful.

8 MR. NELSON: Thank you, Your Honor.

9 MS. CARLON: The next speaker is Jon Meijer.  
10 Please state your name and affiliation for the record.

11 MR. MEIJER: Yes, thank you. My name is John  
12 Meijer. I'm here on behalf -- and Mary Scalco will not  
13 be on this call. I'm here on behalf of the Drycleaning  
14 & Laundry Institute. We are a national, international  
15 organization for dry cleaners. And I want to thank  
16 OSHA and Your Honor for allowing me to speak today. I  
17 think I'm taking more notes than you all are for the  
18 previous comments, but I do appreciate the comments  
19 from the National Marine Manufacturers Association. I  
20 almost say ditto.

21 One thing about the dry cleaning industry -- today  
22 is a great example. In the great state of Maryland and

1 in this area in general, it's going to be 100 degrees  
2 today. And it is hot. So what is a dry cleaner doing  
3 today? Well, they're pretty much done. For their  
4 production capacity is -- they're done. They're -- you  
5 know, they're -- well nobody wants to work in that kind  
6 of heat, in general. So the -- the -- the average dry  
7 cleaner has seven employees. There's probably three  
8 people in production, one who actually does the  
9 cleaning and maybe one or two, that are actually doing  
10 the finishing of the garments. Since COVID, we lost  
11 one third of our industry. We are one of the most  
12 regulated industries in the United States, always have  
13 been, whether it be EPA or an OSHA regulation.

14 We are not against this regulation at all. Our  
15 issue is really this one-size-fits-all. It is a real  
16 problem for small businesses and people like me who  
17 have to try to figure all this out for everybody. It's  
18 also much easier if the feds -- on a national level, we  
19 have one regulation versus dealing with 50 different  
20 regulations. And as we know now, many states are  
21 looking at their own regulation and then we may have a  
22 national regulation.

1           So we're not against the regulation; we want our  
2           employees to be protected in every way possible. Most  
3           dry cleaners in this country, they don't worry when you  
4           take a break. They're not worried when you need a  
5           break, you need water -- that's it, go get it. It's --  
6           it's not a real issue on that side of it. The dry  
7           cleaning industry and dry cleaning itself, since 2020 I  
8           guess, has dropped -- well with the loss of dry  
9           cleaners. But people are dry cleaning less and less  
10          all the time. So by default, there's less production  
11          going on in a dry cleaning facility. Casual wear,  
12          people working from home is a big influence.

13                 In the summertime is when it's the slowest part of  
14          our industry. People dry clean significantly less,  
15          which means there's less production and less -- fewer  
16          people -- or fewer clothes to be processed in the  
17          production area. So it goes down significantly. The  
18          acclimatization part of the regulation is -- is one  
19          area where I do see a -- kind of a big issue. Dry  
20          cleaners -- not all, but many -- close up shop -- and  
21          typically around 4th of July, by the way -- for about a  
22          week. That means everybody is gone for the week, not

1       just one employee or two employees. And it makes --  
2       because the dry cleaners are so small, they almost have  
3       to do it that way. So they just said, you know what?  
4       Here's the vacation, you're taking off a week at this  
5       time. We close up shop and then we come back and  
6       regroup and open up. So it makes a little bit tough.

7             But our most significant issue is -- is the one-  
8       size-fits-all. We would like something that really  
9       fits, you know, a small business like a dry cleaner or  
10      as Mr. Hollis was stating, you know, for -- for his  
11      manufacturer of the boat. It's very significant to us.  
12      It's very difficult to comply with many of the OSHA  
13      regulations out there, because they are so ambiguous.  
14      It's very difficult. And every region has a different  
15      interpretation of how something should work. That is  
16      probably our biggest concern.

17            We do have engineering controls that we use;  
18      evaporative coolers, fans, and what have you in the dry  
19      cleaning facility. And that is very dependent upon  
20      where the dry cleaner is located. So many dry cleaners  
21      in the United States are not in their own self standing  
22      building, where they own the building and the property.

1       They're in a shopping center or a strip mall. So  
2       they're regulated. They're -- they're cooling and  
3       ventilation is completely dictated by the shopping  
4       center. And you may not be able to stick an  
5       evaporative cooler up -- up on a roof or whatever the  
6       case may be. That makes it very difficult.

7               But we do have engineering controls that we do use  
8       that are in there, like evaporative coolers and fans  
9       and -- and water breaks and what have you. We  
10       consistently poll our members through various Zoom  
11       calls and presentations like this. You know, how --  
12       how are you handling when employees get hot and water  
13       and so forth? Well, you need a break, take a break.

14              There's -- the dry cleaning industry and the  
15       number of clothes processed has really gone down very  
16       low. Most production in this industry will stop by 11,  
17       12 o'clock at the latest, if there's production at all.  
18       And in the summertime, it goes way, way down because  
19       people aren't wearing -- well, they're not wearing  
20       suits anyway and -- and dress pants. They're casual --  
21       you know, everybody's casual now. And a lot of that  
22       stuff doesn't need processing anymore. And it's even



1 slower in the summertime when the heat really gets up  
2 there.

3 Today's a great example. I will tell you that the  
4 dry cleaning industry in this state, they're done.  
5 They're not -- they're not doing production at this  
6 point. It's -- it's -- it's hot for everybody. And it  
7 makes that a little bit difficult.

8 So my biggest, I guess, concern is -- is not  
9 against the regulation at all. It's just can we tailor  
10 a regulation that really fits a small business, that  
11 has seven or less employees, that are -- already are  
12 dealing with, you know, the hazard communication  
13 standard, the lockout/tagout standard, bloodborne  
14 pathogen rule, the RCRA rules, the clean -- all the EPA  
15 regulations. And they can't handle much more. It just  
16 keeps going on and on and on.

17 And we're not one of those industries where  
18 we're -- it's an industry strict and -- oh, well you  
19 can't have water or you can't use the bathroom. Want  
20 to use the bathroom; use the bathroom. You -- you want  
21 water; go get it, you know, it's always available. And  
22 most cleaners anyway have the required breaks as

1 required by law; the 15-minute breaks and the half  
2 hour, 45-minute lunches that they provide.

3 So our -- really our issue is I wish you would  
4 take a look at the dry cleaning industry a little bit  
5 more and have something a little bit more tailored that  
6 we could -- that we could work with. And that's  
7 something that the dry cleaners could actually achieve,  
8 in terms of -- without creating this excess burden and  
9 expense on -- on the -- on the dry cleaners as a whole.  
10 So again, I want to thank OSHA and Your Honor. Thank  
11 you very much for allowing me to speak today.

12 JUDGE BELL: Thank you, Mr. Meijer. Questions  
13 from the OSHA room?

14 MR. LEVINSON: Your Honor. Thank you very much,  
15 Mr. Meijer, for your testimony. So I hear you on the  
16 one-size-fits-all. One of the things that people have  
17 talked about as a solution is a performance-oriented  
18 approach toward the rule. One of the tensions that we  
19 often have as an agency is, if you go performance-  
20 oriented, sometimes small businesses will say, I don't  
21 know what you want of me. How do I know when I've done  
22 enough? So how do we add that flexibility that will

1 allow your members to protect folks, while providing  
2 enough benchmarks so that they know when they've met  
3 their obligations?

4 MR. MEIJER: Well, part of that -- I apologize,  
5 I'm trying to show myself, but -- oh what the heck.  
6 They don't want to look at me anyway. What we've done  
7 in the past is for -- what's a good example? I hate to  
8 say it really hasn't come up as much on the OSHA side,  
9 but EPA side -- is education.

10 So we -- if -- if there's a benchmark in there, as  
11 an association, it is our job to educate the industry.  
12 Now, whether you're a member or not, of our  
13 association, everybody's a member when it comes to  
14 advocacy. Just some people decide to pay for  
15 membership and some people don't. So we provide the  
16 education in terms of -- okay, this is what you need to  
17 do.

18 And in a lot of cases, the Small Business  
19 Administration, through the various state agencies or  
20 regional agencies, will put out guidance that says,  
21 okay, you need to do A, B, and C. But once that's out  
22 there, we translate it to the best of our ability. We

1       translate it, and sometimes we have to work  
2       specifically with various regions on their  
3       interpretations on an OSHA regulation. But that's  
4       always been the hardest part for us, is making sure --  
5       for me it's like, okay, I want to make sure I don't  
6       mess anybody up. I want to make sure they're complying  
7       and providing the proper health and safety for their  
8       employees. But it's mostly education and training fact  
9       sheets.

10           And here's a good example. When the hazard  
11       communication program came out, there -- the sample  
12       plan that was provided was extensive. And actually, I  
13       saw a sample plan regarding the heat stress and the --  
14       and how long it was. I said, no one's reading this  
15       thing; it's like 60 pages. No one -- no one's touching  
16       that. It's a small business -- it's difficult for a  
17       small business person, who's very intelligent, they're  
18       hard working -- but it's tough to translate some of  
19       this stuff. So providing help to small business on a  
20       plan or on a -- on a regulation that's just more tiered  
21       for the small business is very helpful to everybody.

22           It's -- it's not being against the health and

1 safety of our employees. Heat's a -- you know, not as  
2 big of an issue, as in many industries, for us because  
3 most -- most dry cleaners I know -- need a break --  
4 need a break; go get it. You know, it's not a --  
5 it's -- it's not the biggest -- it's not this big  
6 issue.

7 But in terms of actual compliance, it's hard to --  
8 it's hard for a small business to figure that out. And  
9 many times, it's hard for people like me to figure it  
10 out. I think OSHA did put out, like, a sample -- I  
11 could be wrong -- or some sort of sample -- what a plan  
12 might look like. And I believe it was like 70 pages.  
13 It was very difficult to look at.

14 MR. LEVINSON: Thank you. Our next question comes  
15 from Zoe Petropoulos, who's joining us online.

16 MS. PETROPOULOS: Hi. Zoe Petropoulos for the  
17 Directorate of Standards and Guidance. I just have a  
18 couple questions. How do members currently monitor  
19 heat or collect any data about heat in the workplaces?  
20 And if there's different methods you're aware of,  
21 that's fine too.

22 MR. MEIJER: Here's a simple answer. Most

1       probably don't monitor heat that much. If they do,  
2       they probably just use a thermometer. I mean, it's  
3       a -- it's a small business. It's -- there's not a -- I  
4       couldn't give you data on -- on specifically on what  
5       the temperature is throughout the day in a production  
6       area, for instance, of a dry cleaning plant. It's  
7       typically -- I know it's typically probably around  
8       80 -- 80 to 90 degrees, something to that effect.

9               And it depends on the engineering control that's  
10       being used. There's a lot of different types of  
11       engineering controls out there. I don't even know all  
12       of them that are used, like spot ventilation that they  
13       put -- if you are pretend like -- it's not an ironing  
14       board, they use an actual -- but pretend like you're in  
15       an ironing board. There'd be this like tube that comes  
16       down, it's got spot ventilation that provides air, cool  
17       air for that person during that process. But in terms  
18       of temperature, I couldn't tell you.

19              MS. PETROPOULOS: Got it. Thanks. And my next  
20       question, I believe you mentioned acclimatization in  
21       your testimony as something that concerned you, but  
22       please correct me if I'm misinterpreting that. If

1       that's the case, my question is about kind of the two  
2       options that OSHA proposed. So the first option for  
3       acclimatization would be that employees would gradually  
4       have their exposure to heat increased over the first  
5       few days of work. And then the second option would be  
6       that employers can develop their own plan that, at a  
7       minimum, implements the procedures at the high heat  
8       trigger whenever the initial heat trigger is -- is --  
9       is met or exceeded, and the high heat provisions being,  
10      you know, mandatory rest breaks, hazard alert, and  
11      observation. I'm wondering if you can speak to whether  
12      those options are feasible based on the experience of  
13      your members. And you know, if they're not, what sort  
14      of revisions might make them more feasible for your --  
15      your member employees -- employers?

16           MR. MEIJER: I think. Well, my personal --  
17      personally and I don't have the data -- I don't know,  
18      you know, the acclimatization role -- I don't know how  
19      much that really affects. But you're talking about a  
20      whole business. Gathering -- grant you, it's a very  
21      small business, but you're asking everyone to come in,  
22      and then everyone -- well, the three people say --

1       let's say, that have to deal with the climate  
2       acclimatization part of it. When you -- in a dry  
3       cleaning plant, when you have the processing, you kind  
4       of have to work -- there's several things that happen.  
5       And basically, everyone kind of -- if you need a break,  
6       you need a break, in general. But there's like a step  
7       one, step two, step three. And it kind of has a flow  
8       to it all the way around. So I guess you could try to  
9       say, okay -- I don't know how you would do that with --  
10      if -- if you have one business, that's all -- that has  
11      to do everything at the same time. And I'm asking.

12           MS. PETROPOULOS: You're asking me what? I'm  
13      sorry.

14           MR. MEIJER: I'm asking -- I'm not quite sure how  
15      a business that takes off for a week, has to comes back  
16      and does it, the entire business, at the same time.

17           MS. PETROPOULOS: Whether all of the employees  
18      would need to or just the returning one? Is that the  
19      question?

20           MR. MEIJER: Well, they -- they would all need --  
21      they would all be returning.

22           MS. PETROPOULOS: In the case that they're all



1           returning. Got it.

2           MR. MEIJER: And I'm not talking about the -- for  
3           instance, the -- a plant where somebody goes on  
4           vacation and needs acclimatization, you know, kind of  
5           thing. I don't know -- and by the way, as an industry,  
6           I'm not really in support of that for a small business.  
7           I don't think that's -- but now we're talking about a  
8           whole business takes off and that whole business comes  
9           back. A lot of cleaners take off for an entire week.  
10          What are you going to do? Acclimatization -- I  
11          mispronounced it, I'm sorry. Everyone's going to go  
12          through it at the same time? It's very difficult for a  
13          small business to do that. Does that make sense?

14          MS. PETROPOULOS: Yeah. And if there's any more  
15          information that you wish to provide in post-hearing  
16          comment, we would welcome your thoughts on the  
17          acclimatization provision.

18          MR. MEIJER: Oh, absolutely -- absolutely. I will  
19          do that. But again, our goal is the same. And by and  
20          large, you know, I understand -- I completely  
21          understand the role. It's the tailorization of it that  
22          I just think is important.

1 MS. PETROPOULOS: Thanks so much. And that's it  
2 for me, for my questions.

3 MR. LEVINSON: Your Honor, the last question comes  
4 from Grace, here in the room.

5 MS. SHIN: Hi. Joo-Hyung Shin from OSHA. I have  
6 two questions. My first question is, could you  
7 elaborate more on the heat exposure that is unique to  
8 your industry?

9 MR. MEIJER: I am so sorry. I can hardly hear  
10 you.

11 MS. SHIN: I'm sorry. This Joo-Hyung Shin from  
12 OSHA.

13 MR. MEIJER: Uh-huh.

14 MS. SHIN: Could you elaborate on the types of  
15 heat exposure that are unique to your industry?

16 MR. MEIJER: Oh, it would be primarily the -- the  
17 finishing equipment. Are you talking about the -- the  
18 type -- where it comes from?

19 MS. SHIN: Yes.

20 MR. MEIJER: Primarily, steam that's generated by  
21 a boiler that goes to the production equipment.

22 MS. SHIN: May I ask how long the duration is for

1           those types of heat exposure during a workday?

2           MR. MEIJER: Typically, only in the morning. So  
3           if -- if in fact -- today's a perfect example. It's  
4           100 degrees. They're coming in earlier than most  
5           times. A production person will come in earlier and  
6           they'll be -- they'll be out earlier. Typically when  
7           production is done -- in general, production is done  
8           just in the morning anyway. And the primary reason for  
9           that, it's not really based on heat so much, but  
10          although that's a big factor. It's based, primarily,  
11          because customers pick up in the afternoon. So  
12          everything is done in the morning and then the  
13          afternoon, customers will come in and pick up their --  
14          pick up their clothing.

15          When it's hot outside, like today is a great  
16          example, they're working a couple hours tops and  
17          they're out. And in the summertime, just like, you  
18          know, as it started summer a couple of days ago, the  
19          number of pieces or the production is way down anyway.  
20          Dry cleaning, primarily, it's very, very slow in the  
21          summertime. Picks up much more in the winter time.

22          MS. SHIN: Thank you. My last question is, now or

1 in post-hearing comments, if you could provide us more  
2 detail on your thoughts on the cost estimates that OSHA  
3 came up with? And if there are any disagreements, if  
4 you could provide alternatives, what cost estimates  
5 make more sense to you -- if you could provide us some  
6 of those examples to us in post-hearing, we would  
7 greatly appreciate it. Thank you.

8 MR. MEIJER: Yes, ma'am, I have a question. You  
9 said provide cost estimates on --

10 MS. SHIN: Yes.

11 MR. MEIJER: On the -- on ventilation, on the  
12 engineering control?

13 MS. SHIN: Yes. I think the provision -- if you  
14 look at it and you see our unit cost like it takes  
15 some, you know, like this number of minutes to comply  
16 with this provision. And if that feels a bit off in  
17 your experience, we would love to hear your thoughts on  
18 that.

19 MR. MEIJER: I am so sorry I'm having -- it's the  
20 microphone with her, I can't quite --

21 MR. LEVINSON: Yeah. Mr. Meijer, this is Andy  
22 Levinson for OSHA. So --

1 MR. MEIJER: Yes, sir.

2 MR. LEVINSON: What she was asking is in OSHA's  
3 notice of proposed rulemaking, we provide cost  
4 estimates. For example, it would take so much time to  
5 produce a heat injury and illness plan, it would take X  
6 amount of time to do training per employee, it would  
7 take -- cost us this much to provide water, for  
8 example. If -- we noted you didn't provide a notice of  
9 proposed rulemaking comment -- initial comments. So we  
10 just wanted to make sure that your industry had the  
11 chance, if you had any thoughts on whether or not our  
12 cost estimates were accurate or not for your industry,  
13 we would love that in post-hearing comments. Does that  
14 make sense?

15 MR. MEIJER: It makes perfect sense. And I  
16 apologize here. Was there cost estimates provided  
17 specific to dry cleaning?

18 MR. LEVINSON: So we make broad ranges for  
19 everybody that's covered by the industry based on the  
20 information that we have.

21 MR. MEIJER: Okay.

22 MR. LEVINSON: So going from the proposal to the

1 final, we're always trying to improve the accuracy of  
2 our estimates. So any information that your industry  
3 can provide would help improve our overall accuracy.

4 MR. MEIJER: Yes, sir. Got it. Thank you.

5 JUDGE BELL: Any other questions from the OSHA  
6 room?

7 MR. LEVINSON: No. Your Honor, that concludes  
8 OSHA's questions.

9 JUDGE BELL: From the Solicitors?

10 MS. LEVIN: Jennifer Levin from the Solicitor's  
11 Office. No questions. Thank you very much.

12 JUDGE BELL: Are there any other questions for Mr.  
13 Meijer?

14 MS. CARLON: There are not, Your Honor.

15 JUDGE BELL: Mr. Meijer, thank you very much for  
16 your testimony. We greatly appreciate it.

17 MR. MEIJER: Thank you, sir.

18 MS. CARLON: The next speaker is Nicole Upano.  
19 Please state your name and affiliation for the record.

20 MS. UPANO: Good morning. My name is Nicole  
21 Upano. I serve as Associate Vice President of Housing  
22 Policy and Regulatory Affairs at the National Apartment

1 Association. Today, I'm representing the nearly  
2 100,000 combined members of the NAA and the National  
3 Multifamily Housing Council, who own, operate, manage  
4 and develop rental housing across the country. NAA and  
5 NMHC appreciate my opportunity to appear at today's  
6 hearing, and thank you, Judge Bell and OSHA leadership,  
7 for your willingness to learn more about the industry's  
8 perspective on this proposed rule.

9 We appreciate OSHA's work to ensure that America's  
10 workers have safe and healthy working conditions, a  
11 goal that we wholeheartedly share. The rental housing  
12 industry is committed to providing affordable housing  
13 for American families, while ensuring that all  
14 employees in the industry ensure -- enjoy safe working  
15 conditions. For our part, NAA supports the industry's  
16 workforce with online credentialing and in-person  
17 training for our members, which incorporate workplace  
18 safety through our Education Institute.

19 Every NAA, EI -- excuse me -- every NAA EI  
20 training module for our CAMT program, which is the  
21 Certificate for Apartment Maintenance Technicians,  
22 emphasizes the need for maintenance professionals to

1       avoid shortcuts and reduce their individual safety  
2       risks, as well as risks to residents and rental  
3       communities. Collectively, both organizations  
4       encourage our members to handle potential safety issues  
5       proactively, in an individualized manner that allow  
6       each business to properly regulate their workplaces  
7       based on the safety challenges facing that particular  
8       jurisdiction.

9               Yet as our -- as my fellow panelists before me  
10       have mentioned, our concern is the proposed one-size-  
11       fits-all approach across industries and climates of  
12       this rule. First, we believe the proposed rule is  
13       unworkable for the industry. To comply with the  
14       proposed rule, it's our understanding that businesses  
15       would need to be trained in -- need to train heat  
16       safety coordinators that could be readily dispatched  
17       based on forecast or hourly temperature readings, and  
18       be ready to set up shaded areas, water stations,  
19       observers, enforce a buddy system of sorts at a  
20       moment's notice. And those contingencies would need to  
21       be deployed depending on the weather.

22               These measures are unnecessary and unworkable for



1 industry professionals who spend the majority of their  
2 day successfully working independently across sites.  
3 Just drawing from NAAs leading industry credentialing  
4 programs, we do not prescribe industry standards  
5 because we acknowledge, in this regard, that on-site  
6 teams of property managers and maintenance  
7 professionals have inherent autonomy in their job  
8 responsibilities. They cover sprawling, garden style  
9 communities or multi-site territories within their  
10 company's portfolio and throughout their workdays.

11 On any given day, onsite teams are performing walk  
12 through inspections, maintenance tasks that are highly  
13 variable depending on the season, emergency maintenance  
14 requests, fulfilling a mix of preventative maintenance  
15 and service requests, and addressing specific  
16 compliance responsibilities for individual communities.  
17 Industry professionals are empowered to use their  
18 discretion to move between outdoor and temperature-  
19 controlled environments that reduce their health and  
20 safety risks due to high heat.

21 On top of that, owners and property management  
22 firms develop policies and practices for their

1 employees to reduce health risks on the job so that  
2 they thrive alongside their residents at our rental  
3 communities. They offer flexible work schedules, allow  
4 employees to schedule strenuous activity during off  
5 peak hours, provide education to recognize the signs of  
6 overheating, and widely encourage breaks for rest and  
7 hydration. On-site teams also stay in constant contact  
8 and communication about team member whereabouts to help  
9 mitigate health safety risks to employees.

10 Industry professionals already mitigate their  
11 risks to high heat exposure and do so on a property-by-  
12 property basis in ways that work for them, but still  
13 ensure that deadlines are met and jobs get done,  
14 without this national standard being in place. The  
15 industry is also experiencing a shortage of maintenance  
16 professionals. Essentially, requiring a buddy system  
17 to monitor heat triggers and imposing strict  
18 acclimatization plans for new employees and those  
19 returning from vacation puts unnecessary pressures on  
20 our small but mighty workforce and their ability to  
21 perform their job responsibilities efficiently and  
22 effectively. This would be a significant impediment

1       for our employees, who are used to operating  
2       independently, and do so now, safely and successfully,  
3       without the imposition of the standard.

4               Secondly, we believe this rule is not necessary at  
5       this time, and especially not at a national scale for  
6       every workplace. An incremental approach with  
7       appropriate study and refinement along the way would be  
8       a better way to proceed. The industry has decades of  
9       experience successfully addressing workers' encounters  
10      with the weather. 80 degrees in Tucson is very much  
11      different than 80 degrees in Milwaukee. The rental  
12      housing industry and its workers take a variety of  
13      approaches to address weather, that reflect the  
14      diversity of employees' tasks and the particulars of  
15      their climate. Those variations, even within the  
16      industry, further underscore the wisdom of an  
17      incremental approach here.

18             Thirdly, and lastly, we believe the rule is also  
19      unduly costly and not proven to achieve its goal to  
20      protect workers utilizing this valued but imperfect  
21      one-size-fits-all approach. The industry respects its  
22      workers and wants them to operate safely and

1 responsibly. The industry's concern, however, is with  
2 the substantial regulatory burdens here, the paperwork  
3 and regimentation burdens of this standard, none of  
4 which directly impact workers, but do considerably  
5 affect rental housing providers operating costs.

6 Further, OSHA's own data shows no significant  
7 benefit for workers in the rental housing industry.  
8 And we believe the proposed rule would increase costs  
9 for rental housing industry, which would in turn chill  
10 future development and redevelopment of rental housing  
11 and further exacerbate the nation's housing undersupply  
12 crisis. This approach is in direct conflict with  
13 President Trump's housing priorities to boost housing  
14 supply and reduce costs for tens of millions of  
15 Americans who rent.

16 For these reasons, the rental housing industry,  
17 NAA, and NMHC -- we urge OSHA to withdraw the proposed  
18 rule for further study. Alternatively, we would ask,  
19 if you move forward with this rule, that -- that you  
20 exclude the rental housing industry. This concludes my  
21 remarks, and I thank you again for the opportunity to  
22 share the industry's perspective. And I'm happy to

1 answer any questions. Thank you.

2 JUDGE BELL: Thank you. Questions from the OSHA  
3 room?

4 MR. LEVINSON: Andrew Levinson for OSHA. Thank  
5 you very much for your testimony, Ms. Upano. My first  
6 question is -- you talked a lot about the mobile  
7 workforce and the high degree of independence it sounds  
8 like your -- your workers have while they're out  
9 working on properties. As OSHA thinks about this  
10 issue. What should employers have to do to protect a  
11 mobile workforce and ensure that those workers are, in  
12 fact, safe while they're out working on properties?

13 MS. UPANO: Well, I appreciate the question. I  
14 think it's certainly difficult to have any sort of  
15 monitoring above and beyond what is already being done.  
16 Proptech, in our industry, already helps us sort of  
17 vaguely monitor employees, but also track the work  
18 orders that they're doing, where they are on site, and  
19 you know, it helps them maximize their time. If  
20 they're working on a boiler, they may just be  
21 monitoring the sensors that don't require heat  
22 monitoring or safety checks versus, you know, being in

1           that room all day. That's not something they do.  
2           They're -- they're moving across sites quite widely.

3           I'm happy to just go back to our Education  
4           Institute and provide you any sort of specifics that we  
5           can about those standards, or for our members -- our  
6           members range from the small, independent rental owner  
7           all the way up to the largest multi-state international  
8           companies operating in the U.S. -- to suggest some of  
9           the -- some of what's in their existing safety plans.

10           MR. LEVINSON: Thank you very much. Our next  
11           questions from OSHA come from Danielle Watson.

12           MS. WATSON: Hi. This is Danielle Watson from  
13           OSHA. The first question I have is regarding  
14           acclimatization. The first one is, in your testimony,  
15           you mentioned some mitigation such as off-peak working  
16           hours and that kind of thing to help with the heat. Is  
17           there anything additional that's done for newly hired  
18           employees or those that maybe were not working for a  
19           while and now returned to do the type of work. Do  
20           you -- do you happen to know if any of the members are  
21           doing anything additional?

22           MS. UPANO: Sure. New employees all receive

1 training for the -- the facilities that they're  
2 operating and as well as for individual community's  
3 specific maintenance needs or work needs. I would have  
4 to go back to see if any training is -- is issued for  
5 newly returning employees. Again, we -- we give them a  
6 lot of discretion, a lot of breaks, and opportunities  
7 for hydration that underlie any sort of protocols that  
8 are in place at a higher level companywide.

9 MS. WATSON: Okay. Thank you. The -- the next  
10 comment that I have -- or question sorry -- is  
11 regarding a written comment that was submitted,  
12 mentioning challenges of providing warning signs when  
13 the ambient temperature regularly exceeds 120 degrees.  
14 And I just was curious if you could just expand on that  
15 a little bit?

16 MS. UPANO: Are you saying the tracking of -- of  
17 monitoring high heat temperatures? Am I hearing you  
18 correctly?

19 MS. WATSON: It was more so the posting of  
20 signage, warning signs that had to do with the high  
21 temperature.

22 MS. UPANO: Yeah. You know, those -- those

1 notices are typically posted around the community and  
2 especially in the workshop for maintenance  
3 professionals or in the leasing office. But again,  
4 they're quite mobile in the work that they do. So  
5 between verbal conversations with their supervisors and  
6 what is placed in the limited areas where they are  
7 placed, that is how housing providers provide that sort  
8 of education.

9 MS. WATSON: Okay. All right. Thank you. And I  
10 just had one more question. If you could explain what  
11 are some of the instances where temperatures during --  
12 throughout the day of work, that it would be 120  
13 degrees or more for indoor areas?

14 MS. UPANO: Sure. It would be in a -- you know,  
15 every -- this rule does not distinguish between  
16 different types of employees. And for -- for our  
17 maintenance professionals who are allowed to do that  
18 work -- and it's not limited to trades in a specific  
19 area -- they're working in a boiler room or you know,  
20 perhaps outside in -- in the parking area. But those  
21 duties are limited and dependent on the needs of a  
22 particular community. So it's hard to keep track of



1           how often that they are performing those duties.

2           MS. WATSON:   Okay.   Thank you.   That's all the  
3           questions I have.

4           MR. LEVINSON:   Your Honor, the next questions from  
5           OSHA come from Zoe Petropoulos, who's joining us  
6           online.

7           MS. PETROPOULOS:   Hey, Zoe Petropoulos with the  
8           Directorate of Standards and Guidance.   You mentioned  
9           in your testimony that your industry has decades of  
10          experience protecting workers from weather hazards.  
11          And please correct me if that's a misquote.   And you  
12          also mentioned the geographic differences in heat  
13          across the country.   And it seems that maybe your  
14          industry is -- is considering those things.   And if  
15          that's true, can you share how your member employers  
16          currently account for geography in current health and  
17          safety policies, and specifically what data they use to  
18          inform those -- those customizations?

19          MS. UPANO:   Thank you for the question.   I'll have  
20          to get back to you on the data piece.   But I should  
21          have mentioned earlier that NAA consists of about 140  
22          state and local affiliates across the country that help

1 provide education to our member companies. So in  
2 addition to the credentialing that NAA provides, the  
3 industry does have at its disposal state and local  
4 trade associations who can provide them, you know,  
5 unique or nuanced guidance or specifics on how to train  
6 their employees for workplace safety, as I said, the  
7 Arizona multifamily -- or the Arizona Multihousing  
8 Association has very much different training protocols  
9 than, say, the Indiana Apartment Association in  
10 advising their -- their membership.

11 MS. PETROPOULOS: Got it. Yeah. And that's  
12 great. That last example, if there's any specifics you  
13 can include on that or similar examples that would be  
14 helpful. Thanks. That's it for me.

15 MS. UPANO: Thank you.

16 MR. LEVINSON: Thank you, Your Honor. The next  
17 questions from OSHA come from Tiffany DeFoe who is  
18 joining us online.

19 MS. DEFOE: Hello. And I want to first, thank you  
20 not only for your testimony, but also for the  
21 information that you provided about rest breaks, which  
22 have addressed some of the questions that I had

1 prepared. But I would still like to ask -- can you  
2 clarify a little bit about when maintenance workers and  
3 other employees are taking at-will rest breaks, is that  
4 paid time or is that sort of covered by their pay  
5 structure or is it unpaid time?

6 MS. UPANO: I'd have to get back to you on that.  
7 While some maintenance employees are hourly workers,  
8 some may be salaried. And so there would be a  
9 different structure for those -- for those breaks. But  
10 they are highly encouraged, especially in high heat  
11 situations. And you know, whether that's taking a  
12 break in the work truck in an air-conditioned  
13 environment between jobs or in a covered area at the  
14 apartment community, indoor or outdoor, they're  
15 certainly welcome to take those breaks at any time.

16 MS. DEFOE: Thank you very much. And I -- I think  
17 that that addressed the last of my remaining questions.  
18 Thank you.

19 MR. LEVINSON: Thank you. And Your Honor, the  
20 last questions from OSHA come from Adriana.

21 MS. LOPEZ-MENENDEZ: Thank you. Adriana Lopez  
22 with OSHA. In your comment, you argue that the

1 proposed standard is unnecessary as the rental housing  
2 industry has several decades of experience dealing with  
3 workers experience with weather. Two questions. What  
4 methods have your members adopted that have been  
5 effective in the prevention of heat-related illnesses?

6 MS. UPANO: Thank you for the question. I would  
7 want to reiterate that our members have -- their rental  
8 communities come in all sizes and structures, whether  
9 it's a garden style community in a sprawling exurban  
10 environment or in a high rise within a city. And those  
11 protocols definitely have to differ depending on  
12 property type and location. And our members -- as I  
13 said, we have 140 affiliates across the country who are  
14 also now educating on specific state standards as well.  
15 They need to incorporate all of those factors as they  
16 make decisions about protocols.

17 MS. LOPEZ-MENENDEZ: Thank you. And then my next  
18 question. In your experience what types of occupations  
19 in your industry, are most at risk for heat-related  
20 illnesses?

21 MS. UPANO: What types of employees? Did I hear  
22 you correctly?

1 MS. LOPEZ-MENENDEZ: Yeah, which occupations in  
2 your industry?

3 MS. UPANO: So if I would say that would be on-  
4 site teams that are monitoring, providing, or doing  
5 inspections or providing ongoing maintenance, whether  
6 that's the property manager or a maintenance  
7 professional. They each have a stake in that.

8 MS. LOPEZ-MENENDEZ: All Right. Thank you.  
9 That's it for me.

10 MR. LEVINSON: And Your Honor, that concludes  
11 OSHA's questions.

12 JUDGE BELL: Questions from the Solicitor?

13 MS. LEVIN: Jennifer Levin for the Solicitor's  
14 Office. Your Honor, I have no questions. Thank you.

15 JUDGE BELL: Any other questions for the witness?

16 MS. CARLON: There are none, Your Honor.

17 JUDGE BELL: Ma'am, thank you very much for your  
18 testimony. It's been very helpful.

19 MS. UPANO: Thank you, again.

20 MS. CARLON: And the next speaker is Keith  
21 Stephenson. Please state your name and affiliation for  
22 the record.

1 MR. STEPHENSON: Hello? Can you hear me?

2 JUDGE BELL: Yes.

3 MR. STEPHENSON: Okay. Yeah. Sorry, I'm not on  
4 video. I don't know what I need to do to get on video,  
5 but if my verbal testimony is okay, then I'll continue.

6 JUDGE BELL: It's fine. We'll use our  
7 imagination.

8 MR. STEPHENSON: That's probably better. Thank  
9 you, Judge.

10 JUDGE BELL: Go ahead please.

11 MR. STEPHENSON: My name is Keith Stephenson, and  
12 I'm the Director of Public Affairs on behalf of IAAPA,  
13 which is the Global Association for the Attractions  
14 Industry. Thank you for the opportunity to comment on  
15 the Occupational Safety and Health Administration's  
16 advance Notice of Proposed Rulemaking on Heat Injury  
17 and Illness Prevention in Outdoor and Indoor Work  
18 Settings.

19 IAAPA represents 6000 leading owners, operators,  
20 suppliers, and manufacturers of amusement parks, theme  
21 parks, attractions, water parks, resorts, family  
22 entertainment centers, zoos, aquariums, science

1 centers, museums, cruise lines, and others in all 50  
2 states. Our corporate office is located in Orlando,  
3 Florida. While the industry is diverse, parks and  
4 attractions large and small share the common goal of  
5 ensuring the safety and security of their employees and  
6 guests, which includes, of course, heat injury and  
7 illness prevention. Our members' facilities are  
8 designed for safety, comfort and convenience. In fact,  
9 parks and attractions safely accommodate 881 million  
10 guests and employees each year. The following  
11 represent a few general examples of heat management  
12 practices utilized by outdoor parks and attractions to  
13 prevent heat injury and illness.

14 Number one, policies that provide employees with  
15 regular breaks away from heat, access to water, access  
16 to shade and air-conditioning as appropriate for  
17 prevention and recovery, and guidance regarding how to  
18 recognize and prevent heat-related injury and illness.  
19 Number two, managers, directors, supervisors,  
20 employees, and safety teams are trained to learn the  
21 early signs of excessive heat exposure, have  
22 notification, operating, and reporting procedures to

1 follow, and access to on-site first aid.

2 Third, our operators use policies based on  
3 utilization of wet globe technology or temperature,  
4 which is measured of heat stress that considers  
5 temperature, humidity, wind speed, sun angle, and cloud  
6 cover, which is solar radiation. Many operators use  
7 this technology instead of relying on the heat index  
8 alone, which only takes into consideration temperature,  
9 humidity, and wind. These practices are scalable for  
10 different business models and different climates, which  
11 is important since a significant percentage of parks  
12 and attractions operate outside during the summer  
13 months.

14 For example, based on the 80-degree heat index  
15 threshold proposed in the rule, Florida would exceed  
16 this threshold 278 days of the year. This underscores  
17 the need for flexibility based on location. Different  
18 regions require different approaches and levels for  
19 alerting or actions to reduce the risk of excessive  
20 notification to employees. Employers should also have  
21 the option to use local sensors for measurement instead  
22 of national or regional weather service information,



1       since the conditions can vary greatly across the region  
2       at any given time.

3             Heat injury statistics cited by OSHA demonstrate  
4       our industry's success with self-regulation. While  
5       OSHA notes in the ANPRM that since 2018, 789 heat-  
6       related hospitalizations and 54 heart related  
7       fatalities across nearly 275 unique industries have  
8       been documented by OSHA through workplace inspections  
9       and violations. Hospitalizations overwhelmingly  
10      occurred in different industries, not the attractions  
11      industry. During the same period, only two hospital  
12      incidents were reported for amusement and theme parks,  
13      despite employing well over 1 million employees and  
14      accommodating 880 million guests each year.

15            Given our industry's excellent record with respect  
16      to heat-related illness and the potential for  
17      unintended consequences for imposing a one size -- one-  
18      size-fits-all regulation across all industries, we  
19      respectfully urge OSHA to consider the following.

20            Limit the scope of OSHA regulation in this area to  
21      those industries that have experienced a  
22      disproportionate number of heat-related injuries and

1 illnesses in the United States. In addition to  
2 allowing industries with a safe record in this area to  
3 continue operating with flexibility, this will allow  
4 OSHA to focus its limited enforcement resources where  
5 they can have the most impact. With a more limited  
6 scope of regulation in this area, OSHA can encourage  
7 industries outside of the scope to adhere to industry  
8 best practices that are specifically adapted to their  
9 local climates and business models.

10 If OSHA determines that it must apply its  
11 regulations to our industry, we urge you to take  
12 geographic variations into consideration in any  
13 regulation and provide maximum flexibility to  
14 individual parks and attractions, by allowing local  
15 exposure measurements and local limits for alerts and  
16 mitigation actions. And I believe that -- we believe  
17 that OSHA's final recommendations should be done with  
18 clarity, really through research, and then followed up  
19 with educating -- education and training to ensure  
20 maximum compliance. A one-size-fits-all approach to  
21 addressing work heat injury and illness prevention is  
22 counterproductive, since arguably OSHA already has

1 workplace safety enforcement under the General Duty  
2 Clause.

3 Finally, IAAPA is a member of the Coalition for  
4 Workplace Safety, which is a coalition of trade  
5 associations and companies representing many industries  
6 with millions of employees in every state in the  
7 nation. We're focused on establishing reasonable and  
8 responsible workplace safety standards across the  
9 country. The Coalition offered feedback during the  
10 Small Business Regulatory Enforcement Fairness Act  
11 process in December 20th, 2023. These comments  
12 supplemented feedback presented on February 4th, 2022  
13 involving OSHA's ANPRM. And I believe they also  
14 presented for 20 minutes on many of these subjects  
15 during a hearing like this last week. IAAPA fully  
16 supports their position and recommendations, which go  
17 into much more detail than what I've offered today.  
18 Thank you for the opportunity to comment today. I'd be  
19 happy to answer any questions.

20 JUDGE BELL: Thank you, sir. Questions from the  
21 OSHA room?

22 MR. LEVINSON: Yes, Your Honor. Andrew Levinson

1       for OSHA. Thank you very much for your testimony  
2       today, Mr. Stephenson. One of the issues that's come  
3       up for the agency are people have stated that they've  
4       had challenges with the concept of rest breaks as  
5       needed, that that might provide undue logistical and  
6       operational challenges. Do you have any thoughts or  
7       recommendations on how the agency could ensure that  
8       workers get rest breaks when they're experiencing heat  
9       stress, without posing an undue burden on employers?

10           MR. STEPHENSON: Yeah. Thank you for that  
11       question. I'm not the expert. You know, the  
12       attraction industry is highly diverse, and they utilize  
13       and employ the best safety and security experts in the  
14       world. I need to consult with them and to get a random  
15       sample of our members to provide more detailed answers  
16       in writing during the post-comment period. But again,  
17       I just -- I would point back to the fact that, you know  
18       during the three year period, we only had two  
19       incidences of heat injury and illness, and we host 881  
20       million guests each year. It's a number one priority  
21       for parks and attractions.

22           MR. LEVINSON: Thank you. Your Honor, the next

1 questions come from Zoe Petropoulos, who's joining us  
2 online.

3 MS. PETROPOULOS: Hi. Zoe Petropoulos for the  
4 Directorate of Standards and Guidance. I have a couple  
5 questions for you, if that's okay. You mentioned that  
6 OSHA should account for geographic variation in a  
7 standard and we've heard recommendations from other  
8 witnesses during the hearing that suggests that OSHA  
9 should revise the proposed triggers and have triggers  
10 that vary by geography. I assume IAAPA would agree  
11 with this approach based on your testimony, but is that  
12 correct that you would agree with that approach?

13 MR. STEPHENSON: Yeah, we -- we definitely believe  
14 that regionalization is the way to go. I mean, I  
15 mentioned earlier in my testimony that, you know,  
16 Florida, for example, would exceed the threshold by 278  
17 days. You know, but acclimation, you know, would be  
18 very different in that circumstance. And also  
19 determining, you know, heat would be very different in  
20 that circumstance, which is why we -- you know, we  
21 support the wet globe method. But yeah, absolutely,  
22 regionalization and really local instrumentation, I

1 think is critical to the success of -- of any rule that  
2 you -- that -- that is finalized.

3 MS. PETROPOULOS: Got it. So I have some follow-  
4 up questions then. Now or in your post-hearing  
5 comments, I'm curious your thoughts on, if OSHA were to  
6 do triggers based on geography, what boundaries you  
7 would propose OSHA using -- so for instance, at the  
8 county level, at the state level, at a regional  
9 level -- and what data you would propose OSHA rely on  
10 to determine those?

11 MR. STEPHENSON: Yeah, that's a great question.  
12 And it's - it's a very complex answer, and it's a  
13 complex issue which is why we're concerned about the  
14 one-size-fits-all. And even if we drew this down to  
15 the local level you know, we have some members that  
16 have done studies on, you know, what - what is heat.  
17 And for example, if - if you have a large area that's  
18 outdoors, we have members that have studied - okay.,  
19 well, what's the difference between heat on asphalt?  
20 What's the difference between heat on - on - on sand.  
21 What's the difference in heat near a pool? What's the  
22 difference in heat on grass? And what's the difference

1       if it's - if it's six feet from the ground, three feet  
2       from the ground, two feet from the ground, eight feet  
3       from the ground and higher? And the differences in  
4       those temperatures were very broad.

5               And so again, even if you were to focus it down to  
6       the county and local level, I think it's important for  
7       each facility to have that flexibility, based on the --  
8       the -- the dynamics of their facility. And you know, I  
9       know that's a very sort of esoteric answer, but the  
10      issue is complex. And some of our members have found  
11      that it's even complex at the ground level. I hope  
12      I've answered your question. I -- I probably threw  
13      more questions than answers, but I just wanted to kind  
14      of give you that perspective from some of the findings  
15      we've had from some studies we've done locally.

16             MS. PETROPOULOS: Yeah. I have a couple other  
17      questions for you and some follow-up from that. If --  
18      you mentioned some studies and if those are things  
19      you're able to share with us in the docket, we would  
20      greatly appreciate that. And yeah, any details on data  
21      your member employers currently collect or use to  
22      determine kind of safety protocols in their

1 environments, that would be helpful.

2 MR. STEPHENSON: Yeah, safety protocols would  
3 be -- we'd be happy to do that because we have so many.  
4 As far as the study is concerned, I don't know if it's  
5 proprietary because they were looking at it from their  
6 own perspective, but I would love to -- to share that  
7 with you. Let me ask them that question and to see if  
8 I can share that with you.

9 MS. PETROPOULOS: Thanks. I have a couple more  
10 questions, I'm sorry. So you mentioned that many  
11 operators in your network use wet bulb globe  
12 temperature to monitor heat conditions on job sites.  
13 I'm curious, the ones who do currently collect that  
14 data, how do they use it? Do they determine -- do they  
15 use that to determine when certain controls should be  
16 put in place, or do they use it in another way? Could  
17 you expand upon that?

18 MR. STEPHENSON: Yeah, I think what -- they were  
19 doing this to determine how the proposed rule would  
20 impact them in terms of triggering the 80, you know,  
21 the 80 degree threshold. Like I said, you know, their  
22 business is safety. And you know, with 881 million



1 people that they accommodate each year, including  
2 employees and the fact that during a three year --  
3 three year period, they have only had two  
4 hospitalizations, which I don't know what those were  
5 for. You know, whatever policies and procedures this  
6 diverse industry has in place, it's working.

7 Again, I believe that this company or these  
8 companies were looking at it to determine your  
9 thresholds and to study them. And I think they  
10 determined that -- that the 80 -- that again, the --  
11 the 80 degree threshold is -- is -- is very arbitrary.  
12 And -- and they were just trying to study it just to  
13 determine, you know, how would that play out at their  
14 facility? And again, they figured -- they found out  
15 that it would impact the facility differently depending  
16 on different areas or elevations.

17 MS. PETROPOULOS: Got it. I have just two more  
18 things I want to follow-up on. I want to make sure --  
19 either now or in post-hearing comments, if you can  
20 clarify that the 80 and 90 that they were measuring  
21 against in this -- in these studies was heat index, not  
22 wet bulb globe temperature of 80 and 90? I just want

1 to make sure I understand what you're saying.

2 MR. STEPHENSON: Yeah. Again, I'll -- I'll ask to  
3 see if this information is proprietary, but they were  
4 studying it between 80 and 90.

5 MS. PETROPOULOS: Heat index or wet bulb globe  
6 temperature?

7 MR. STEPHENSON: I'd have to ask that question.

8 MS. PETROPOULOS: Okay, sorry I have so many  
9 specific questions.

10 MR. STEPHENSON: I think they were trying to  
11 compare and contrast between maybe methods they use and  
12 what OSHA is proposing. And let me ask them for  
13 clarity, because I guess if we're recommending wet  
14 globe, that would compare and contrast what you're  
15 proposing. So let me clarify that in our post  
16 comments.

17 MS. PETROPOULOS: Okay. And I'll just leave  
18 another question with you that you can consider in  
19 post-hearing comments; it's related. So OSHA proposed  
20 two approaches for the triggers. One is the heat index  
21 of triggers of 80 and 90. And then also another option  
22 is using wet bulb globe temperature and then

1 calculating the NIOSH REL and RAL. And so those  
2 incorporate things like workload and PPE. And so it  
3 sounds like maybe some of your member employers have  
4 thought about maybe the difference of using heat index  
5 versus wet bulb globe temperature. So would be curious  
6 kind of if any member employers kind of envision  
7 themselves using wet bulb globe temperature, if that  
8 would be an easier option or a preferable option? And  
9 then maybe any data that they're willing or able to  
10 share on kind of how they've measured the two and how  
11 they've compared them and -- and preferences that they  
12 have on using those -- we would be really appreciative  
13 to hear your thoughts on those things there.

14 MR. STEPHENSON: Yeah, I will -- I will check with  
15 these members to see if they're willing to make this  
16 public. Again, I know that their preference would be  
17 wet globe. Again, I'm guessing, and I'll clarify  
18 whether or not they were kind of comparing the two, but  
19 their preference is definitely wet globe.

20 But again, I have to reiterate the fact that, you  
21 know -- you know, why create a new one-size-fits-all  
22 regulatory requirement for a problem that doesn't exist

1       within our industry? And I think that, you know, we  
2       would prefer -- and based on the heat injury statistics  
3       from OSHA that demonstrates our industry's success --  
4       that we would prefer self-regulation and inter-industry  
5       collaboration. So we'll do our best to get that to you  
6       for your own purposes. But again, I feel we believe  
7       that our industry is -- is doing all the right things.

8               MS. PETROPOULOS: Thanks so much for your time and  
9       thanks for listening to all my questions.

10              MR. STEPHENSON: Thank you. They're great  
11       questions. I -- I don't have all those answers.  
12       Again, I'm not the expert, but I will -- I will dig  
13       into those.

14              MS. PETROPOULOS: Thank you.

15              MR. LEVINSON: Your Honor, the next question from  
16       OSHA comes from Danielle Watson here in the room.

17              MS. WATSON: Hi, this is Danielle Watson from  
18       OSHA. During your testimony, you had mentioned access  
19       to water and I was just curious if you could explain  
20       how some of your member employers provide that access  
21       and what are the typical quantity or amount of -- of  
22       the water?

1 MR. STEPHENSON: Yeah. Again, I'm not the expert.  
2 It's a diverse industry, so I'd like to consult them,  
3 if I could, and provide a more thorough answer in  
4 writing during my post-comment period.

5 MS. WATSON: Sure, thank you. I appreciate it.  
6 That's -- that's the only question I had.

7 MR. LEVINSON: And Your Honor, the last question  
8 comes from Adriana Lopez here in the room.

9 MS. LOPEZ-MENENDEZ: Hi, this is Adriana Lopez  
10 with OSHA. I just had a question about heat-related  
11 illness prevention training. If you could, how much  
12 time and other resources would you anticipating --  
13 anticipate in updating these training programs so that  
14 you could comply with the requirements of the proposed  
15 standard? And are these changes that could be made to  
16 these requirements -- what could we do to provide  
17 flexibility to you?

18 MR. STEPHENSON: Well, I think the best way to  
19 provide flexibility to us would be to not have the new  
20 regulation, if it's going to exist, apply to us for all  
21 the reasons I've mentioned thus far. You know, we  
22 haven't studied that. The only thing we're focused

1       on -- our industry is focused on is being a leader in  
2       safety and security and -- and I believe that the  
3       safety citations I've referenced during this call  
4       demonstrates that we are. And so I -- our industry  
5       believes that we're doing a great job and, you know,  
6       safety is our business. And so we'd like to continue  
7       doing that.

8               We've not studied, you know, how this would apply  
9       to us in terms of how it would, you know, impact  
10      standing operating procedure. But again, as I  
11      mentioned, it's a highly diverse industry and we have  
12      so many different business models and they really apply  
13      safety protocols relevant to their own local business  
14      based on experience and based on the needs of their  
15      employees. And again, because of our safety record, we  
16      believe that they should continue to do that. And  
17      overlaying a new regulation to a problem that doesn't  
18      exist in our industry would really create more harm  
19      than good because of compliance and maybe lack of  
20      clarity. And specifically, we -- many of our members  
21      are small businesses. And so, you know, we think it's  
22      best for them to be able to operate their business and

1 to not have to take the time to take a look at how  
2 these new regulations would impact their standing  
3 operating procedures and then implement them. Because  
4 at the end of the day, based on our safety record, all  
5 that would really do for them was create more time and  
6 cost. And it wouldn't really provide more safety in  
7 our opinion.

8 MS. LOPEZ-MENENDEZ: Thank you.

9 MR. LEVINSON: Thank you, Your Honor. That  
10 concludes OSHA's questions.

11 JUDGE BELL: Any questions from the Solicitor?

12 MS. LEVIN: Jennifer Levin from the Solicitor's  
13 Office, Your Honor. No further questions. Thank you.

14 JUDGE BELL: Are there any other questions for  
15 this witness?

16 MS. CARLON: There are not, Your Honor.

17 JUDGE BELL: Mr. Stephenson, thank you very much  
18 for your testimony. We appreciate it.

19 MR. STEPHENSON: Thank you, Judge. Thank you,  
20 panelists. Thank you very much.

21 JUDGE BELL: All right. Are we at the point where  
22 it's lunch time?

1 MS. CARLON: Yes, Your Honor.

2 JUDGE BELL: Okay. So we're back at 1 o'clock  
3 Eastern Time, is that right?

4 MR. LEVINSON: Yes, Your Honor.

5 JUDGE BELL: All right. Just on that note, I will  
6 tell you that I've been getting emergency alerts that  
7 the Cincinnati Department of Labor offices are closed  
8 today because of the heat.

9 MR. LEVINSON: Thank you.

10 JUDGE BELL: And a failure of the air-conditioning  
11 system in the Peck Federal Office building, apparently.

12 MR. LEVINSON: We had similar issues yesterday in  
13 Philadelphia, sir.

14 JUDGE BELL: Yeah. It's quite a heat outbreak  
15 we're having. All right. I'll talk to you at 1  
16 o'clock. Thanks, everybody.

17 MR. LEVINSON: Thank you, Your Honor.

18 (Break.)

19 MS. CARLON: This is Miriam Carlon from ABT  
20 Global, OSHA's contractor. It's 1 o'clock eastern time  
21 and we are now rejoining OSHA's informal rulemaking  
22 hearing for Heat Injury and Illness Prevention in



1 Outdoor and Indoor Work Settings. We will review our  
2 technical logistics again before we begin. If you are  
3 speaking today, you will receive a notification on your  
4 screen that you are being promoted to the panelist  
5 group a few minutes before it is time to provide your  
6 testimony.

7 Once promoted to the panelist role, you will be  
8 able to unmute and turn on your camera. We ask that  
9 you do not unmute or turn on your camera until your  
10 name has been called and you have been asked to start  
11 your testimony. Speakers connected by telephone should  
12 unmute their phones when called to testify.

13 All Webex attendees can access closed captioning  
14 and translated captioning by clicking on the CC icon in  
15 the lower left-hand corner of the application. You can  
16 individually select your caption language if  
17 translation is required.

18 All YouTube viewers will have access to auto  
19 translation the day after the hearing.

20 Dependent on timing, there may be opportunity to  
21 ask questions of other speakers giving testimony. You  
22 may press the raise hand button at the bottom of the

1 Webex application to indicate that you have a question.  
2 If there is time, you will be called on by name and  
3 promoted to the panelists group to unmute and ask your  
4 question.

5 If you are having any technical difficulties,  
6 please send an email with your name and phone number to  
7 public\_hearing@abtassoc.com.

8 I will be introducing each speaker in turn.  
9 Please speak slowly and clearly so our court reporter  
10 can record these proceedings accurately.

11 The first speaker will be Jo Strang. Please state  
12 your name and affiliation for the record.

13 MS. STRANG: My name is Jo Strang, and I am with  
14 the American Short Line and Regional Railroad  
15 Association.

16 JUDGE BELL: Ms. Strang, this is Judge Bell. Go  
17 ahead, please.

18 MS. STRANG: All right. Thank you.

19 The American Short Line and Regional Railroad  
20 Association represents the nation's 603 short line  
21 railroads and more than 500 industry suppliers that  
22 support them. Thank you for allowing me to speak to

1       you today about the NPRM and its potential impact on  
2       the small business freight rail industry. Short line  
3       railroads are indeed small businesses with an average  
4       of 30 employees that provide outsized impact on the  
5       nation's freight rail system.

6               We serve as the on and off ramp for access,  
7       particularly in small town and rural America, serving  
8       more than 10,000 customers and shipping all  
9       commodities. This NPRM, while well-intentioned to  
10      protect workers from serious heat-related injuries and  
11      illnesses, is overly burdensome and should not apply to  
12      railroads as we are already regulated in this area by  
13      the Federal Railroad Administration.

14             FRA's actions to address heat-related employee  
15      rest and employee fatigue issues supersede OSHA's  
16      authority in the railroad context. Railroad safety is  
17      primarily regulated by the FRA, which has authority to  
18      prescribe regulations and issue orders for every area  
19      of railroad safety, supplementing laws and regulations.

20             49 U.S.C. 20103 is the code under which FRA  
21      derives its authority. FRA has exercised its authority  
22      broadly to cover the NPRM subject matter. OSHA's

1 authority to regulate railroads is limited by FRA's  
2 exercise of its statutory authority because OSHA  
3 regulations do not apply when another federal agency  
4 exercises statutory authority to prescribe or enforce  
5 standards or regulations.

6 Accordingly, OSHA's authority to regulate ends  
7 when another federal agency -- in this case, FRA --  
8 regulates in the same area. Moreover, FRA's safety  
9 data demonstrates that railroads' heat-related risk  
10 mitigation programs have been successful. Railroads  
11 provide extensive accident and incident reporting under  
12 49 CFR Part 225.

13 As a result, FRA has collected detailed heat  
14 illness and injury data from the railroad industry over  
15 an extended period. Over the last five years, from  
16 2020 to 2024, the average -- annual average on duty  
17 heat-related illness injury reports were 26 across the  
18 entire railroad industry.

19 In context, there are nearly 200,000 railroad  
20 employees nationwide. The heat-related injury rate for  
21 those employees was less than 0.015 injuries reported  
22 for 200,000 railroad employee hours worked. Over the

1 last 30 years, only a single railroad employee fatality  
2 report cites heat as a potential cause.

3 While we firmly believe that railroads should be  
4 excluded from this NPRM, and that as our primary  
5 request, if the NPRM moves forward, as the regulatory  
6 requirements will cause a significant burden to small  
7 business railroads in the form of duplicated  
8 recordkeeping and tracking. Additionally, many  
9 requirements are simply not relevant for the industry  
10 or possible in the operational context of railroading.

11 We're very few employees working in a defined  
12 space of any kind where employees wear multiple hats  
13 serving in varied functions. With the treat -- heat-  
14 index triggers that do not reflect a region's climate  
15 or weather patterns, the specifics of the vast array of  
16 mitigation measures that railroads currently take, and  
17 the burdens that this rule would impose, are laid out  
18 in our submitted comments to the record from January  
19 14th, 2025.

20 In short, we agree that it is imperative to  
21 provide a safe working environment at all times and in  
22 all weather conditions. Heat-related safety measures

1 are currently adequately and thoroughly regulated by  
2 the FRA. Moreover, injury and accident data over a  
3 long period of time shows that these mitigation  
4 measures are highly successful. Therefore, we  
5 respectfully ask that railroads be excluded from OSHA  
6 oversight in the final rulemaking. That concludes my  
7 statement.

8 JUDGE BELL: Thank you, Ms. Strang.

9 Questions from the OSHA room?

10 MR. LEVINSON: Yes, Your Honor.

11 Thank you, ma'am, for your comments, and we  
12 certainly take your point on the limits of OSHA's  
13 authority and jurisdiction, and that is something that  
14 we will seriously consider. Let me ask you a question  
15 about -- you said this is already covered by FRA and  
16 that what you're doing is adequate.

17 Can you tell us a little bit about what short line  
18 railroads are actually doing to protect workers from  
19 heat, and how do you ensure that it's adequate,  
20 particularly for a mobile workforce where you said, you  
21 know, people don't have defined work settings or  
22 workplaces?

1 MS. STRANG: Of course. So first of all, FRA  
2 regulates in the area that certain types of machinery  
3 that's used, if it's -- has to have air-conditioning.  
4 And then, the other way that railroads keep their  
5 workers safer, they're -- for example, for our small  
6 business railroads, many of them are family-owned, and  
7 they treat their employees like family. They take a  
8 look out for when the temperatures are high; they know  
9 their local working conditions.

10 And for us, in the small railroad industry, you  
11 know, our distances aren't huge, for one, for most --  
12 most of the small railroads. And people have access to  
13 water, and to shade, and to being cool, and they also  
14 do multiple functions. So in a small railroad, most  
15 employees do more than one thing. So they may be a  
16 track worker on Tuesday, and a locomotive engineer on  
17 Wednesday, because a lot of railroads don't operate  
18 every day, and they may have different functions.

19 Somebody may work in an office one day, they may  
20 work out in the field another day. So they're not  
21 exposed to something, like, for a long period of time  
22 in any given day, most of the time, unless there may be

1 a special project that's ongoing, in that -- which case  
2 people will monitor it more closely.

3 My colleague, Eric Betke, is -- actually runs a  
4 railroad, and he'll be able to tell you what his  
5 railroad does, and I believe he's on next. So I'm not  
6 sure if I covered your question or not, but I'm also  
7 happy to survey our members and see if there's anything  
8 that I've missed that -- that they want me to tell you.

9 MR. LEVINSON: Thank you. We do have some  
10 additional questions.

11 The next question is going to come from Jonathan  
12 Berr, here in the room.

13 MR. BEARR: Hi, Jonathan Berr, OSHA Directorate  
14 of the Standards and Guidance. Ms. Strang, in your  
15 association's comments, it was noted that including a  
16 list of work activities covered by the Heat Injury and  
17 Illness Prevention Plan was unnecessary. How would you  
18 ensure that the HIIPP adequately addresses all heat-  
19 related hazards without identifying the affected work  
20 activities?

21 MS. STRANG: Well, I think our safety record  
22 speaks for itself in the number of injuries and



1 accidents that are -- have been reported over the past  
2 several years.

3 MR. BEARR: And just a follow up on that. Do you  
4 think that the different types of work tasks performed  
5 by different employees would -- is important with  
6 respect to protecting workers from heat?

7 MS. STRANG: So I think part of the problem is  
8 because short line railroads do multiple functions in  
9 any given day, it would be - just be overwhelmingly  
10 difficult. And these aren't big, sophisticated  
11 companies. They're small businesses that are already  
12 extremely heavily regulated by the Federal Railroad  
13 Administration, by the Pipeline and Hazardous Material  
14 Safety Administration, by the Federal Motor Carrier  
15 Safety Administration. So this, I mean it's - it's  
16 just simply not needed in our industry.

17 MR. BEARR: Thank you. One more question. If the  
18 supervisor were also assigned as a heat safety  
19 coordinator, do you anticipate any substantive changes  
20 to their work?

21 MS. STRANG: I would have to review the specific  
22 duties, but we have -- typically, it's -- in certain

1 types of work, there is somebody who is already going  
2 to be in charge. So for example, if they're on  
3 locomotive, the conductor is in charge of the train.  
4 If they are doing work on the track, then there's  
5 typically a roadway worker in charge. So as long as  
6 they could do their other duties, you know, perhaps  
7 not. But you know, it would really depend on exactly  
8 what they were doing and what the requirements would  
9 be.

10 MR. BEARR: Thank you.

11 MR. LEVINSON: All right.

12 Your Honor, the next questions come from Brenda  
13 Finter, who is online.

14 MS. FINTER: Patti will be asking these questions,  
15 Andy.

16 MR. LEVINSON: Oh, sorry.

17 Patti Downs, who is online.

18 MS. DOWNS: That's okay.

19 Patti Downs with the Directorate of Standards and  
20 Guidance. We like to keep you on your toes, right?

21 Ms. Strang, in response to an earlier question,  
22 you mentioned that your workers have access to shaded

1 areas and breaks. However, other commenters have  
2 stated that access to shade and frequent breaks aren't  
3 realistic for railway workers. Could you just please  
4 discuss your experience with these controls a little,  
5 and maybe any alternatives that have been used?

6 MS. STRANG: Yes. Yeah, so it's the way that OSHA  
7 prescribes the shade, and rest, and the donning and  
8 doffing of PPE that becomes a problem. So if it's --  
9 if it's an area of shade where they can go sit in their  
10 pickup truck for a while, that's fine. If it's  
11 something where they have to erect a tent or do  
12 something like that, it's impracticable.

13 MS. DOWNS: Okay. Great. Thank you so much.  
14 That's all I have, Andy.

15 MR. LEVINSON: Your Honor, the next questions come  
16 from Dalton Moore, who's here in the room with us.

17 MR. MOORE: Hi. This is Dalton Moore with the  
18 Directorate of Enforcement Programs, and I just have a  
19 question. And you can either answer this, or maybe, in  
20 your post-hearing is fine, but as far as, like,  
21 industry hazard alerts, do you have any suggestions on  
22 how to make hazard alerts more effective when

1       temperatures exceed the high heat trigger? And also,  
2       two, what would make a hazard alert more effective, in  
3       your opinion, for the industry?

4           MS. STRANG: So those are -- those are good  
5       questions. And you know, we certainly distribute all  
6       of the OSHA materials that we get. I'm on all of your  
7       distribution lists, and we find most of them to be, you  
8       know, fairly relevant, and helpful, and help raise  
9       awareness of a certain issue. So if I could ask my  
10      members how they use them and get back to you, I'd be  
11      happy to do that.

12           MR. MOORE: (Audio interference) you.

13           MR. LEVINSON: Thank you, ma'am, and post-hearing  
14      comments are always very welcome. Our --

15           MS. STRANG: Then, great.

16           MR. LEVINSON: -- last question from OSHA comes  
17      from Rachel, who's joining us online.

18           MS. CARSE: Yes.

19           JUDGE BELL: We're not hearing you.

20           MS. CARSE: Okay. Sorry about that.

21           I just have one quick question. Can you tell us  
22      about the size of your industry? And did I hear you

1           correctly that you would consider all your members  
2           small businesses?

3           MS. STRANG:   So it depends.   It depends whose  
4           definition of small business you're using.

5           MS. CARSE:   Uh-huh.

6           MS. STRANG:   I -- the Federal Railroad  
7           Administration's definition of small businesses, they  
8           are.   By the Small Business Administration definition  
9           of small businesses, most of them are.   Some of them  
10          are owned by -- owned by a holding company, and may not  
11          be, but the vast majority are -- are independently,  
12          privately-owned companies.   So there are 603 short line  
13          railroads in United States.

14          MS. CARSE:   And do you happen to know about,  
15          approximately, how many employees?

16          MS. STRANG:   It's roughly 30,000 employees.

17          MS. CARSE:   Okay.   All right.   Thank you.

18          MR. LEVINSON:   Your Honor, that concludes OSHA's  
19          questions.

20          JUDGE BELL:   Thank you.   Any questions from the  
21          Solicitor?

22          MS. WILES:   Thank you, Your Honor.   Linda Wiles

1 from the Solicitor's Office.

2 Thank you, Ms. Strang, for your testimony today,  
3 and for your time.

4 I have no questions.

5 JUDGE BELL: All right. Any other questions for  
6 Ms. Strang?

7 MS. CARLON: Yes, Your Honor. We have one from  
8 Mr. Lundegren.

9 MR. LUNDEGREN: Thank you, Your Honor, and panel.

10 And hi, Jo. This is Bruce Lundegren at the Office  
11 of Advocacy at the U.S. Small --

12 MS. STRANG: Hi, Bruce. Nice to see you.

13 MR. LUNDEGREN: -- Business Administration.

14 Mobile. Nice to see you. Well, I can't see you, but  
15 I --

16 MS. STRANG: Well, actually, I just realized that.

17 MR. LUNDEGREN: -- can hear you.

18 MS. STRANG: I'm so sorry. I forgot to turn my  
19 camera on. Hi.

20 MR. LUNDEGREN: Oh, there you are. Okay. Good.

21 MS. STRANG: Yeah, sorry about that.

22 MR. LUNDEGREN: That's okay. Jo -- also though,

1       this is Bruce Lundegren. Thank you for your  
2       association and your members' participation in the  
3       SBREFA panel process on this a couple years ago. We  
4       appreciate that. Can you just explain a little bit  
5       more how to -- what distinguishes a short line railroad  
6       from the larger railroads, and how you are  
7       operationally different from them?

8           MS. STRANG: Well, I mean, in many respects, our  
9       operations are the same. It's the same gauge of track,  
10      the same type of, you know -- the same types of cars,  
11      et cetera. But in a lot of ways, we're very different.  
12      So short line railroads, for one, our ownership is  
13      different. We're -- we're privately -- all of the  
14      railroads are privately held.

15           Many of them are family-owned businesses. Many  
16      are family businesses that have been in their family  
17      since the 1800s. In the railroad industry, if you  
18      remember, is a very old industry. The, you know -- the  
19      second oldest chartered railroad had their charter in  
20      1838. They're still operating. It's the Strasburg  
21      Railroad in Pennsylvania.

22           So we've been around for a very long time. One of

1 the things that's different, though, about a small  
2 business short line railroad is there is not the same  
3 level of density on our lines, most of the density is  
4 fairly light. Most - no short lines may not operate  
5 every day, or if they - and they may only operate in  
6 daylight hours.

7 So the big railroads are all 365, 24/7 operations.  
8 Ours typically are not. So there's a lot - a lot  
9 different aspects of it. And the other thing is, most  
10 people do more than one job. We don't have the luxury  
11 of having people that are dedicated to a particular  
12 craft most of the time, so people will do other things,  
13 right?

14 So in the large railroad, people are usually  
15 defined by their craft and class. And then, there are  
16 union agreements where they may have rules about what  
17 work they're allowed to do or not allowed to do. We -  
18 we usually don't have those in our industry. Most of  
19 it is, you know - I'll use the example of the  
20 Sandersville Railroad as a very small railroad. It  
21 runs 38 miles.

22 The only commodity they haul is clay, and they



1 haul clay four times a week. So the people that work  
2 on that railroad do multiple functions. So they may  
3 work on the track and repair the track one day, and  
4 they may be a locomotive engineer the next, and that  
5 does not happen on the larger railroads.

6 MR. LUNDEGREN: Okay. And this is Bruce  
7 Lundegren. And following up on Andy Levinson's  
8 questions about this issue of dual jurisdiction between  
9 Federal Railroad and OSHA, can you - do your member  
10 companies - do they already have health and safety  
11 programs in place, and do those include a heat  
12 component?

13 MS. STRANG: So if they are in -- they -- first of  
14 all, they -- they do. They all have -- they all have  
15 safety plans, and they all work very closely with  
16 their -- with their -- typically, with their local FRA  
17 inspector. The other thing that some -- some railroads  
18 also fall under state heat plans that exist. So we  
19 have a number of railroads that are in states that have  
20 a state requirement for a heat plan that they'll --  
21 that they'll then follow.

22 So that's -- and actually, that brings up another,

1 kind of, wrinkle in our comment, which was, you know,  
2 there is not a harmonization between the state plans  
3 and the NPRM. So there are some variations where some  
4 states have different requirements, and people were a  
5 little concerned about that too. But for the most  
6 part, I mean, I think the -- the safety data really  
7 speaks for itself, and we just don't have heat-related  
8 injuries or illnesses. So whether they have a plan or  
9 not, whatever they're doing seems to be working.

10 MR. LUNDEGREN: Okay. Thank you. That's all I  
11 had.

12 Thank you, Your Honor.

13 JUDGE BELL: All right.

14 Any other questions?

15 MS. CARLON: There are not, Your Honor.

16 JUDGE BELL: All right.

17 Ma'am, thank you very much for your testimony. We  
18 really appreciate it.

19 MS. STRANG: Thank you. I appreciate the  
20 opportunity.

21 JUDGE BELL: Okay. Bye-bye.

22 MS. CARLON: The next speaker is Eric Betke.

1 Please state your name and affiliation for the record.

2 MR. BETKE: My name is Eric Betke. I'm the  
3 President of -

4 JUDGE BELL: Mr. Betke, we can't hear you.

5 MR. BETKE: Can you hear me now?

6 JUDGE BELL: Very faintly.

7 MR. BETKE: All right. Is that better?

8 JUDGE BELL: That is much better. Thank you.

9 MR. BETKE: Okay. Good.

10 All right. My name is Eric Betke. I'm the  
11 President of the Farmrail System Incorporated, located  
12 in Clinton, Oklahoma, and I'm also the President of the  
13 Finger Lakes Railway up in Geneva, New York. I - so  
14 with that, I'll start.

15 My name is Eric Betke, and I serve as the  
16 President of Farmrail System Inc., a Class III short  
17 line freight rail operator known as Western Oklahoma's  
18 Regional Railroad. Our 390 route miles comprise part  
19 of an effective interline service territory, including  
20 12 states within a 500-mile radius, and 11 metropolitan  
21 areas within 300 miles. Farmrail also has a joint  
22 venture railroad operation in upstate New York, the

1 Finger Lakes Railway.

2 Our employee-owned enterprise speaks to a  
3 comprehensive workforce commitment to safety at all  
4 times and under all conditions. Heat-related safety is  
5 critical for a carrier which operates for 3 1/2 summer  
6 months in temperatures exceeding 85 degrees. This  
7 NPRM, while well-intentioned to protect workers from  
8 serious heat-related illnesses and injuries, is  
9 superseded by the Federal Railroad Administration, such  
10 that railroads should be excluded from a final  
11 rulemaking.

12 The FRA has exercised its authority broadly to  
13 cover the NPRM subject matter, including regulations  
14 governing hours of service employees that preclude the  
15 application of OSHA's heat injury and illness  
16 prevention regulations concerning rest breaks for train  
17 operations' employees, dispatchers, maintenance of way  
18 personnel, and signal system employees.

19 Moreover, FRA's safety data demonstrates that  
20 railroads' heat-related risk mitigation programs have  
21 been extraordinarily successful. Over the last five  
22 years, the heat-related injury rate for railroad

1 employees was less than .015 injuries reported for  
2 200,000 hours worked.

3 Since its inception in 1981, Farmrail has had only  
4 four heat-related incidents. The NPRM as written does  
5 not reasonably take into consideration procedures  
6 already in place on railroads, nor does it contemplate  
7 the realities of railroad options. Examples include  
8 OSHA fails to consider specific personal  
9 characteristics and work factors that may affect heat  
10 strain. As a part of the hiring process, railroads  
11 assess whether a candidate for employment can perform  
12 job-specific tasks related to the position, including  
13 work being done in potentially high heat conditions.

14 Emergency response plans must rely on a designated  
15 person to invoke heat emergency procedures. This  
16 stipulation is impractical on a railroad where  
17 operations are spread out over tens of miles and crews  
18 can vary day-to-day. Every employee is responsible for  
19 safety, and the closest to a potential event must be  
20 able to respond quickly.

21 The NPRM's requirements are overly burdensome for  
22 the railroad services. The requirement of a high heat

1 threshold of 80 degrees as a triggering event does not  
2 consider regional climate realities. There would be  
3 high heat events 110 days out of the year in Western  
4 Oklahoma. Railroads may have dozens of work sites by  
5 definition, including a vehicle riding alongside a  
6 train, remote stations, and a headquarters location.

7 Each would require a definitive plan. Farmrail is  
8 steadfastly committed to workplace safety and fulfills  
9 the intention of this NPRM in the following ways.

10 First and foremost, the potential impact of heat and  
11 other weather conditions is addressed in the daily  
12 safety briefing that precedes all work activities. It  
13 covers heat mitigation actions to be taken, locations  
14 of available resources, cool places, the proper actions  
15 and treatments should an injury or illness occur.

16 Each crew is provided with coolers, ice, water,  
17 Gatorade, cooling PPE, air-conditioned buildings or  
18 vehicles, and empowered to take rest breaks as needed.  
19 In some cases, work schedules are modified to avoid the  
20 hottest hours of the day. All field resources carry  
21 radios that connect to each other, as well as the  
22 dispatcher in the main office.

1 Farmrail is just one example of more than 600  
2 short lines geographically ranging from Alaska to  
3 Florida that would be excessively and unnecessarily  
4 burdened by this rulemaking. FRA's regulations are  
5 reflective of the industry work environment, and  
6 mitigation procedures have been shown to be effective  
7 over many years' experience. We urge you to exclude  
8 railroads from the final rulemaking as we are  
9 appropriately regulated in the areas contemplated by  
10 this NPRM by the FRA. Thank you for the opportunity to  
11 participate in this hearing.

12 JUDGE BELL: Thank you, Mr. Betke. We appreciate  
13 it.

14 Questions from the OSHA room, please?

15 MR. LEVINSON: Yes, Your Honor. Andrew Levinson  
16 for OSHA.

17 Thank you very much, Mr. Betke, for your  
18 testimony. As I stated before, we take your point  
19 about FRA authority and jurisdiction, and that's  
20 something that the agency will carefully consider. One  
21 of the things I'm trying to understand, given all of  
22 the things that you've said that you're doing in

1 Farmrail, what particular aspects of OSHA's regulation  
2 would be unduly burdensome for you?

3 MR. BETKE: Well, I -- I think having a, you  
4 know -- a designated safety officer everywhere -- you  
5 know, we have 390 miles in Oklahoma. So you can have  
6 people anywhere on the system 120 miles away from other  
7 folks. So you know, you would require a 1/2 a dozen or  
8 eight different specifically designed, you know, folks  
9 focusing on the heat injury and illness.

10 And what we try to do is train our people to all  
11 be very aware of it. When you live in Oklahoma, you  
12 have to be aware of the heat. It's part of life out  
13 there every day. The -- the other component is the  
14 reporting and administrative aspects of this. The, you  
15 know, regulatory nature of railroads is very intense  
16 already, and you know, we want to be able to expend our  
17 resources on making our railroad better, supporting our  
18 people, training our people, rather than doing  
19 additional paperwork. So that's -- you know, that's a  
20 part of it.

21 MR. LEVINSON: Thank you.

22 The next question comes from Zoe Petropoulos,



1       who's joining us online.

2               MS. PETROPOULOS: Hi. Zoe Petropoulos with the  
3       Directorate of Standards and Guidance. I heard you,  
4       you know, mention your successful heat mitigation  
5       programs in your industry, and I was just curious if  
6       any of those programs include specifics on monitoring  
7       heat conditions? And if so, what that typically looks  
8       like?

9               MR. BETKE: Well, so going back to the safety  
10      briefing I mentioned. So every day, there is a safety  
11      briefing before work starts. Sometimes there are  
12      multiple safety briefings during the day if the nature  
13      of the work changes. Heat is a part of that for most  
14      of the summer, as well as the weather in general  
15      because it can be very threatening in Western Oklahoma  
16      with thunderstorms and tornadoes, et cetera.

17              So they use standard weather apps to be able to  
18      monitor where they are during the day. The crew lead,  
19      essentially, takes responsibility for the safety  
20      briefing, the discussion about heat, the discussions  
21      about mitigation of heat, and they're empowered to take  
22      as many breaks as -- as they need. There have been

1 days where we simply haven't worked in the field in  
2 some aspects because it was too warm. And that's just  
3 where we have to be. You have to be safe to be able to  
4 operate out there.

5 MS. PETROPOULOS: Got it. Thank you so much.  
6 That's it for me.

7 MR. LEVINSON: Your Honor, that concludes the  
8 questions from OSHA.

9 JUDGE BELL: Anything from the Solicitor?

10 MS. WILES: Thank you, Your Honor. Linda Wiles  
11 from the Solicitor's Office. No questions for me.  
12 Thank you so much for your time and testimony today.

13 JUDGE BELL: Any other questions for this witness?

14 MS. CARLON: There are none, Your Honor.

15 JUDGE BELL: Mr. Betke, thank you very much for  
16 your testimony. We really appreciate it.

17 MR. BETKE: Thank you. Have a good day.

18 JUDGE BELL: You too.

19 MS. CARLON: The next speaker is Jared Cassity.  
20 Please state your name and affiliation for the record.

21 MR. CASSITY: Jared Cassity, Smart Transportation  
22 Division. I'm the Deputy National Legislative and

1 Safety Director.

2 JUDGE BELL: Mr. Cassity, go ahead, please.

3 MR. CASSITY: All right. Thank you.

4 Good morning. My name is Jared Cassity. I'm the  
5 Deputy National Safety and Legislative Director for  
6 SMART Transportation Division, which is the largest  
7 railroad union in the country representing a variety of  
8 crafts, but most of which are in operations, or the  
9 actual movement of trains, and work as conductors or -  
10 and/or locomotive engineers. We also represent a  
11 number of commuter, transit, and bus properties across  
12 the country, with members typically working in the  
13 conductor, operator, or driver crafts.

14 A quick background on me. Before being elected to  
15 serve in my current position, I worked as a certified  
16 conductor and locomotive engineer for CSX, a Class I  
17 railroad. I come from the craft and I've not only  
18 experienced first-hand the challenges and difficulties  
19 of the job, but also, the necessary exposure to the  
20 elements.

21 But I must say, railroading is unlike any other  
22 job I've ever had, despite the fact that all have

1 required me to work outside. This is because for --  
2 through freight operations, you are often tasked with  
3 walking great distances or working in isolated or  
4 remote areas, but unlike most other jobs, there are no  
5 facilities available, and only the water you can carry,  
6 in the landscape that surrounds you.

7 So to start, I want to say that it is our belief  
8 that OSHA absolutely has authority and jurisdiction to  
9 regulate a rule such as this for the railroad industry.  
10 As you all know, unfortunately, there are times when  
11 the lines of jurisdiction between the agency and the  
12 FRA get a little blurry. But it's clear to us that the  
13 OSHA FRA Policy Statement of 1978 that allows for OSHA  
14 to have jurisdiction over environmental factors.

15 An excerpt from the reference policy provides  
16 that: "FRA has determined that a territorial approach  
17 to the exercise of its statutory jurisdiction over  
18 railroad safety...would deplete energies and resources  
19 better devoted to the safety of railroad operations.  
20 If FRA were to address all occupational safety and  
21 health issues which arise in the railroad yards, shops,  
22 and associated offices, the agency would be forced to

1 develop a staff and field capability which, to an  
2 extent, would duplicate the capability already  
3 possessed by OSHA. In view of this situation, FRA  
4 recognizes that OSHA currently is not precluded from  
5 exercising jurisdiction with respect to conditions not  
6 rooted in railroad operations, nor so closely related  
7 to railroad operations as to require regulation by FRA  
8 in the interest of controlling predominant operational  
9 hazards."

10 As such, I think it's critically important that  
11 you understand the nuances of railroading, the existing  
12 challenges, and the need for sufficient planning.  
13 Trains are like any other machine in that they have  
14 mechanical failures. Whether it's an engine or a  
15 mechanical component, it is not uncommon for a train  
16 crew to experience an unplanned, yet necessary stop,  
17 while on route to their destination.

18 As you can imagine, these unexpected breakdowns  
19 rarely happen in the most convenient of locations, and  
20 unfortunately, the frequency of these experiences is  
21 seemingly on the rise, happening dozens, if not more  
22 times a day across the country. This can be attributed

1 to a whole lot of things, but none more so than the  
2 growing length of trains.

3 It is not uncommon for our members to be tasked  
4 with operating over-the-road trains in excess of three  
5 miles in length, and like with any other type of  
6 equipment, the more loader weight you add to it, the  
7 more likely it is to experience a failure. This  
8 results in one of the crew members having to disembark  
9 the locomotive and walk the train to find the break and  
10 fix it.

11 Walking a train is not easy. More often than not,  
12 you have to take your steps on large, loose rocks that  
13 are fixed on a grade or an angle. You do not have  
14 provided walkways, nor do you have a fixed surface in  
15 which -- in which to take your next step. You are  
16 fully exposed to the elements and you are limited to  
17 only what you can carry.

18 As you can imagine, walking great distances in  
19 this type of scenario takes time, and cannot, nor  
20 should not, be rushed. It takes the average person  
21 approximately 15, 20 minutes to walk a mile with proper  
22 footing. For our conductors, they can be forced to

1 walk more than three miles in this difficult terrain  
2 just to get to the end of their train.

3 This takes energy and time, both of which are  
4 extremely problematic when exposed to extreme heat, but  
5 then, you have to figure in the fact that they have to  
6 walk an additional three miles just to get back to  
7 their locomotive or their train's head end. That means  
8 without any repairs, just walking, a worker will be in  
9 the heat for more than two hours, limited to the water  
10 that he or she can carry.

11 Compounding this issue is the lack of  
12 dependability for communication. Conductors are  
13 provided with handheld radio so that they can  
14 communicate with the engineer in the cab of the  
15 locomotive, but they are only able to do so for a  
16 limited distance. Because of the astronomical length  
17 of trains, conductors often lose their ability to make  
18 a radio connection and have no means in which to relay  
19 their status to their fellow crewmember.

20 The only thing they can do is climb onto the top  
21 of a railroad car in the hopes that the height will  
22 give them a clearer radio path to the head end, or they

1        can walk closer, potentially adding to the exposure.  
2        Another concerning issue is that there are times when  
3        the air-conditioning in locomotives doesn't work. Not  
4        only does this mean that the crew is limited to cooling  
5        themselves by the ambient air, but it also means for  
6        the worker who just walked six miles in the extreme  
7        heat, that they will have no relief.

8                Railroading is not pretty, but it does traverse  
9        some of the best and worst landscapes this nation has  
10       to offer. But that also means that workers are tasked  
11       with walking trains in the desert, the mountains, or  
12       everything in between. Unfortunately, however, there  
13       is rarely a roadway or roadbed for a vehicle to access  
14       those locations, leaving the crew to address their  
15       issue individually.

16               This is where the rule would go a long way toward  
17       protecting the men and women working on or with  
18       America's freight trains. Rail carriers should  
19       absolutely be required to have heat hazard assessments,  
20       and we would like to be a part of that in labor  
21       management collaboration. There should be plans for  
22       the varying degrees of risk to temperature so that a



1 worker can adequately prepare for the task ahead.

2 Communications should be ensured to mitigate  
3 uncertainty or react in an emergency. Training should  
4 be provided, and sufficient amounts of water should be  
5 provided on all locomotives, monitoring of the  
6 temperature, and providing trackers with that  
7 information so they can plan accordingly, and having a  
8 written plan in place for what to do should a heat-  
9 related illness arise.

10 This is not a heavy lift for the rail carriers as  
11 they already require -- they're -- as they are already  
12 required to provide water, and there are means to  
13 improve radio communications. But perhaps what is  
14 needed most is established guidelines that provide for  
15 when an employee must take a break, or what to do when  
16 rest, shade, or hydration isn't immediately available.

17 Plans that protect the worker from discipline when  
18 trying to take the safest course, and then, empower and  
19 encourage them to be proactive in seeking breaks from  
20 the elements rather than powering through it. It was  
21 important to me that I testify here today because the  
22 railroad industry can sometimes seemingly fall through

1 the cracks, but the risk and the effects of heat are  
2 just as real for us as they are for anyone else.

3 The exposures are long, the tasks are difficult,  
4 and the need for proper planning, assessing,  
5 monitoring, communicating, and training could not be  
6 greater. Thank you for allowing me the opportunity to  
7 speak with you today.

8 JUDGE BELL: Thank you, Mr. Cassity.

9 Questions from the OSHA room?

10 MR. LEVINSON: Yes, Your Honor. Andrew Levinson  
11 for OSHA.

12 Thank you very much for your testimony, Mr.  
13 Cassity. One of the things that we received in written  
14 comments was that - from the Association of American  
15 Railroads that commented on the challenges of  
16 providing - of the - the standard's requirements  
17 related to heat emergency procedures would be  
18 particularly challenging for the railroad industry. Do  
19 you have thoughts on that comment?

20 MR. CASSITY: And I apologize. My computer froze  
21 there. I heard heat, and I heard emergency. What was  
22 that last part there?

1 MR. LEVINSON: Yeah, yeah. So the Association of  
2 American Railroads commented that they thought that the  
3 proposed standard's requirements related to heat  
4 emergency procedures would be particularly difficult  
5 for the railroad industry. And we wanted to know if  
6 you had thoughts or comments on that?

7 MR. CASSITY: Yeah. I -- I -- I don't believe  
8 that to be true. I mean, you know, as Ms. Strang  
9 testified earlier, they -- they do things to help  
10 mitigate some of these exposures. The reality of it is  
11 though that the problem arises when -- when things  
12 happen on the railroad industry, and you know, for them  
13 to suggest that they have proper standards in place to  
14 address heat-related emergencies, I do not believe that  
15 to be true.

16 You know, I also heard a lot of the conversation  
17 regarding around the data and the lack of -- or the --  
18 or the suggestion or notion that there's not very many  
19 heat-related injuries. In my experience, we have quite  
20 a few. They're just not reported accurately or  
21 appropriately, and -- and to me, that speaks to the  
22 fact that they're not quite equipped to respond to

1           those heat-related emergencies.

2           I do not believe it to be a big lift for them, but  
3           I -- I do think there needs to be a plan in place,  
4           which this regulation, in my opinion, would do to  
5           provide those guidelines for -- for the carriers. But  
6           also, for the employees to know what the expectation  
7           is, what -- what, you know, they are to do in certain  
8           situations, and -- and we could actually get to  
9           mitigating these factors. But as far as it -- as far  
10          as it being a difficult thing for them to achieve, I --  
11          I -- I just don't -- I don't see that being the case.

12          MR. LEVINSON: Thank you, sir. And if you're  
13          going to file any post-hearing comments, any  
14          information that you have on underreporting among  
15          people in the railroad industry would be greatly  
16          appreciated.

17          MR. CASSITY: Absolutely.

18          MR. LEVINSON: The next question comes from Zoe  
19          Petropoulos, who's joining us online.

20          MS. PETROPOULOS: Hi. Zoe Petropoulos with the  
21          Directorate of Standards and guidance. I have a  
22          question about the written comment that you all

1 submitted. So in your written comment, your  
2 organization urged that thermometers in locomotive cabs  
3 be, quote, self-reporting? I was wondering if you  
4 could explain what you meant by self-reporting? I want  
5 to make sure that we don't misinterpret what you all  
6 were trying to argue there.

7 MR. CASSITY: So basically, giving the crew access  
8 to what's happening in the ambient air temperature  
9 right now. Currently, in the operations, I'm not aware  
10 of any locomotive that provides an external air  
11 temperature. So you know, just having that little bit  
12 of a heads up would make a huge difference.

13 So I mean, obviously you can open the door or  
14 window and say, wow, it's hot. But you know, if you're  
15 walking from the air-conditioning into the heat, you  
16 know, there -- may be -- there may be an adjustment  
17 factor that's not adequately addressed or -- or  
18 accounted for.

19 And so you know, being able to fully understand  
20 and process, you know, what the temperature is.  
21 Ideally, if this rule is put into place, we'll have  
22 plans with temperature thresholds, and you'll be able

1 to judge what the plan is accordingly by being able to  
2 see that temperature. So really, it's just more  
3 information for the crew, part of the monitoring that  
4 the rule addresses and part of the communication. Just  
5 making sure that they're armed with all the information  
6 they need to -- to work safely.

7 MS. PETROPOULOS: Got it. If now, or more likely  
8 in post-hearing comments, if you can share any details  
9 on what you've currently observed with regards to  
10 monitoring in work areas that would be helpful.

11 MR. CASSITY: Sure.

12 MS. PETROPOULOS: Thank you.

13 MR. CASSITY: I'd be happy to.

14 MR. LEVINSON: All right. Your Honor, the next  
15 questions come from Patti Downs, who's joining us  
16 online.

17 MS. DOWNS: Hi. Patti Downs with the Directorate  
18 of Standards and Guidance.

19 Mr. Cassity, you mentioned several challenges  
20 faced by workers, especially during equipment  
21 breakdowns. And OSHA is interested in learning more  
22 about what controls are currently in place and being

1       used to prevent heat-related illness in --- in those  
2       situations?

3           MR. CASSITY:   Sure.   So for the Class I railroads,  
4       which is the majority of the industry, and where I have  
5       previously worked, you know, basically when a breakdown  
6       happens, you - you only can carry what you can carry.  
7       You have a radio strapped to your side, and you have a  
8       lantern if it's nighttime.   Or you may not have a  
9       lantern, but then, you have - I mean, you have one or  
10      two bottles of water.

11           Typically, they don't fit in pockets, so you  
12      literally have to carry them.   And you know, in order  
13      for you to even just get off the locomotive, you have  
14      to have three points of contact, so even trying to  
15      juggle two bottles is tricky.   But let's say you -- you  
16      manage to get two bottles off of locomotive.

17           If -- if you're in a desertous area, or just in  
18      a -- in a -- in a location that's sparse, and there's  
19      not a lot of trees, there is no shade.   I mean, you're  
20      literally trying to walk along a -- a -- a slippery  
21      rock grade walkway, if you will.   And -- and it's  
22      extreme distances, it's difficult.

1           It -- it takes a lot of energy, and you have to  
2           manage the amount of fluid intake you have for -- for  
3           the time that you're out there. You know, if you get a  
4           mile, two miles back, and you need a break, and -- you  
5           know, there needs to be a plan on what to do when you  
6           don't have shade, when you don't have enough hydration,  
7           you know, because the -- the engineer cannot just  
8           disembark the locomotive and bring it to you, or then  
9           they expose themselves to the same situation.

10           And so it's -- it's figuring out those variables,  
11           and it speaks to why the need for the plan is so  
12           critically important because once you're on the ground  
13           and you begin walking, you're -- you're exposed.  
14           There's nothing else you can do. There's -- you're not  
15           packing a tent with you. You're not bringing an  
16           umbrella with you, you know? All you have is the water  
17           you can carry, and it -- it is -- it's difficult.

18           MS. DOWNS: Okay. Thank you. Do your members use  
19           any sort of, like, cooling PPE, or do they take,  
20           like -- I don't know, like, CamelBaks, water backpacks,  
21           anything like that with them in these situations or?

22           MR. CASSITY: So the cooling PPE is sometimes



1       available; it's not always available. It's one of  
2       those things that you grab when -- when the carriers  
3       provide it. Unfortunately, it's not required by any  
4       rule, regulation, or agreement that I'm aware of, at  
5       least not in the conductor or engineer crafts. But  
6       when they are available, you do grab them, and you can  
7       use them.

8               As far as the backpack or the CamelBaks go, that's  
9       kind of tricky in the railroad industry because you've  
10      got to be real careful with things that can grab. So  
11      if you can imagine a train rolling by you, and you have  
12      that excess material that could actually grab a hold of  
13      a piece of equipment, it could, therein, kind of become  
14      its own threat.

15             That being said, I'm not -- I'm not aware of  
16      anything that directly states you can't do that. It  
17      certainly is an idea. It's not something that's  
18      provided. It would, you know -- if someone wanted to  
19      do it, they would have to do it on their own accord at  
20      this point. But you know, it's -- it's something --  
21      it's something certainly to be considered, but there --  
22      there are risks when you -- when you add stuff to your

1           body when you're -- when you're talking about moving  
2           equipment around you.

3           MS. DOWNS: Thank you. That's all the questions I  
4           have.

5           MR. CASSITY: Okay.

6           MR. LEVINSON: Your Honor, the last questions come  
7           from Rachel Carse, who's joining us online.

8           JUDGE BELL: We can't hear you. Still can't hear  
9           you. No. Cannot.

10          MS. CARSE: Can you -- I'm using Jason's computer.  
11          Can you hear me now?

12          JUDGE BELL: Yes.

13          MS. CARSE: Okay.

14          Mr. Cassity, I just wondered if you had any data  
15          or information about temperatures inside the train when  
16          the train is stopped? Is it similar to outdoor  
17          temperatures, higher, lower? Any data, information on  
18          that we would appreciate.

19          MR. CASSITY: Sure. So that -- that does depend.  
20          There is a regulation for locomotives, I believe, built  
21          after 2006. They have to be built with air-  
22          conditioning. There are rules in place that, when a

1 locomotive is available that has air-conditioning, it  
2 has to be the lead locomotive, meaning where the crew  
3 is positioned.

4 So when a train is stopped, assuming -- assuming a  
5 perfect world scenario, it's -- it's a comfortable  
6 environment. Should the air-conditioning stop, or you  
7 be provided a locomotive that doesn't have working air-  
8 conditioning, you are solely limited to the ambient air  
9 that is moving when you're moving. And when you're  
10 idle, it gets really hot.

11 I mean, if you can imagine sitting in a steel box  
12 while the sun beats down. Some of the hottest  
13 experiences in my life, frankly, have been in a -- in a  
14 locomotive without working air-conditioning, and it  
15 wouldn't -- we -- we did not have the ability to take  
16 the temperature, but it would not surprise me a bit  
17 would it -- it wasn't 120, 130 degrees in some  
18 instances.

19 Especially when there's no breeze, it -- it gets  
20 very hot. But I -- I do want to be fair, air-  
21 conditioning is more available than it was when I hired  
22 on. In fact, it's more common than not, but -- but

1       when it does go, it -- it's -- it's a very hot  
2       situation.

3               MS. CARSE:   Okay.   Thank you.   And one last  
4       question.   Regarding rest breaks, can you just  
5       elaborate a little bit on what the current level of  
6       rest breaks are?   Like, how often and how long they are  
7       in your industry, and how people are able to take rest  
8       breaks.

9               MR. CASSITY:   Yeah, sure.   So I'm glad you asked  
10      that.   I would tell you that, frankly speaking, most  
11      members that we represent on Class I railroads probably  
12      don't take rest for fear of the repercussions from  
13      management in doing it.   There are some web-based  
14      training videos that are typically 10, 15 minutes long  
15      that will talk about heat, that say you can take a  
16      break, but it is not a well-known standard, if you  
17      will.

18              When you go out onto the railroad, even in the  
19      middle of summer, it is not something that's readily  
20      talked about.   There is, you know, this theory that you  
21      can take breaks, but knowing, you know - knowing when  
22      that should occur or how that should occur is really

1 not prevalent. And it's one of the reasons that we are  
2 so firmly supportive of this NPRM because it - you  
3 know, this idea or notion of - of how to work safely in  
4 the heat really is not - it's not a present thing, at  
5 least for the Class Is.

6 The short lines may be a little better. They do  
7 have a smaller group, which I think allows for a little  
8 tighter -- or more of a tight knit group and  
9 communication. But you know, for the big railroads,  
10 taking breaks is typically frowned upon, even -- even  
11 in the heat, and it's -- it, you know, I -- I wish I  
12 could tell you for certain. But it's -- it's very  
13 uncommon for someone just to take their break because  
14 they know they're entitled to their break. Typically,  
15 when the break occurs, it's just because they can't go  
16 any further and they have to take that break.

17 MS. CARSE: Okay. Thank you. That's all.

18 MR. LEVINSON: And Your Honor, that concludes  
19 OSHA's questions.

20 JUDGE BELL: Anything from the Solicitor?

21 MS. WILES: Thank you, Your Honor. Linda Wiles  
22 from the Solicitor's Office. I do have one question.

1           Mr. Cassity, thank you for being here today, and  
2           thank you for your testimony. I wanted to ask if you  
3           could elaborate a little bit. When you were describing  
4           work scenarios when the train breaks down, and the crew  
5           has to dismount from the train, and carry their own  
6           supplies, it sounds like the supplies are stored in a  
7           central location, perhaps in the locomotive.

8           Is there a possibility for supplies to be stored  
9           along the train cars, or are there crew members that  
10          work in different locations along the train cars? If  
11          you could just provide a little bit of explanation of  
12          what is the typical work environment under those  
13          circumstances, that would be swell.

14          MR. CASSITY: Sure. So a typical crew in the  
15          railroad industry is -- is a conductor and a locomotive  
16          engineer. It's just two people on the train. They are  
17          stationed in the head end, or lead cab locomotive, the  
18          very first locomotive. That is where the supplies are  
19          kept. There are, typically, packages of water bottles  
20          that are in there. There is a cooler. It's not an  
21          electric cooler; it's a cooler that you, kind of, put  
22          ice on or dump on -- dump ice on it, and -- and try to

1 keep it cool, you know?

2 But a crew can work 12 or more hours. By law,  
3 they're limited to 12, but they can be on duty longer.

4 So that -- that ice doesn't always stay there, and --  
5 and you do have -- that has a part of a factor too.

6 But to get back more to your question, the supplies are  
7 on the locomotive. When you get off the locomotive,  
8 there is really nowhere else for those supplies to be  
9 provided. Some trains do have locomotives in the  
10 middle and the end, not all of them.

11 There is a possibility that there could be water  
12 on them, but typically, the Class Is do not like to  
13 stock water on those because they're not really  
14 accessible for - for someone to get to when they have  
15 the train built. And so you know, once you start  
16 walking, there's - there's really nowhere else for that  
17 water to be. The rail cars themselves cannot house  
18 water. That - there's just no safe location for them  
19 to do so.

20 There are no other people out there working. You  
21 can imagine stretches of -- of rail routes that go from  
22 a hundred miles to 300 miles just for one trip, and you

1 know, obviously you can't -- you can't stock water for  
2 a 300 mile territory. And so it's -- basically, your  
3 only real option is the locomotive and -- and what you  
4 can carry.

5 MS. WILES: Thank you so much.

6 Linda Wiles from Solicitor's Office again. That's  
7 all for me, Your Honor.

8 JUDGE BELL: Any other questions for Mr. Cassity?

9 MS. CARLON: There are not, Your Honor.

10 JUDGE BELL: All right.

11 Mr. Cassity, thanks very much for your testimony.  
12 We appreciate it.

13 MR. CASSITY: Thank you. Thank you, Your Honor.

14 MS. CARLON: The next speaker group is Edison  
15 Electric Institute, represented by Al Payton and  
16 Charmayne Evans. Please state your name and  
17 affiliation for the record.

18 MR. PAYTON: Good morning. My name is Al Payton.  
19 I'm the Vice President of Safety and Technical Training  
20 at Center Point Energy, and I'm here today to speak on  
21 behalf of the Edison Electric Institute.

22 JUDGE BELL: All right. Mr. Payton, go ahead



1       please.

2               MR. PAYTON: Well, definitely, good afternoon,  
3       everyone. Really appreciate the opportunity to speak  
4       with you all this afternoon about OSHA's notice of  
5       proposed rulemaking on Heat Injury and Illness  
6       Prevention in Outdoor and Indoor Work Settings. EEI is  
7       the association that represents all U.S. investor-owned  
8       electric companies. EEI members provide electricity to  
9       more than 250 million Americans and operate in all 50  
10      states and the District of Columbia.

11             The electric power industry supports more than  
12      seven million jobs and communities across the United  
13      States. EEI applauds OSHA's efforts to protect workers  
14      from heat-related injuries and illnesses. EEI member  
15      companies maintain comprehensive safety and health  
16      programs designed to protect employees from all  
17      workplace hazards, including exposure to high heat.

18             EEI member companies have developed sophisticated  
19      programs to address high heat hazards, and based on the  
20      data, these programs are effective in preventing  
21      significant heat illnesses. EEI members are concerned  
22      about some of the provisions -- provisions in OSHA's

1 proposals, particularly those that will require  
2 amendments to existing programs that are working well.

3 EEI urges OSHA to move forward with a simplified  
4 final standard, limited to requirements for water,  
5 rest, shade, and training. Heat is a very complex  
6 hazard, unlike any other OSHA regulates, and is ill-  
7 suited to the type of one fits all standard that OSHA  
8 is proposing for employers in a wide variety of  
9 industries.

10 The prescriptive requirements OSHA proposes on  
11 issues like acclimatization, mandatory break times, and  
12 retraining, and program reviews will be difficult or  
13 impossible to implement for many types of work in the  
14 electric sector, given the variability of work tasks  
15 and conditions. This is particularly true with regard  
16 to work performed to restore electrical services after  
17 major storms or other events.

18 EEI joins the National Association of Electric  
19 Contractors, CTIA-The Wireless Association, USTelecom,  
20 The Broadband Association, and the Utility Clearance  
21 Safety Partnership, in filing a comment urging OSHA to  
22 provide a clear exemption for work performed to restore

1 services.

2 Administering the type of program that OSHA seeks  
3 to mandate, including tracking acclimatization status,  
4 enforcing mandatory break times, retraining following a  
5 heat illness requiring medical treatment will be  
6 challenging for routine work, and nearly impossible for  
7 storm work, during which thousands of EEI member  
8 companies and contract workers are working to restore  
9 essential services to the community efficiently and  
10 safely.

11 We believe EEI should take the following steps:  
12 Simplify the standard; water, rest, shade, and training  
13 are core elements of a heat illness prevention program,  
14 and feasible in multiple industries for businesses of  
15 all sizes. In fact, those elements have been the  
16 cornerstone of OSHA's advice to employers and employees  
17 on how to prevent serious heat illnesses and have  
18 proven to be effective.

19 Evaluate the industry-specific data to determine  
20 the need for additional provisions. OSHA recently  
21 released an analysis of the 2024 injury and illness  
22 data received from employers through the Injury

1 Tracking Application. OSHA should use this data to  
2 evaluate the frequency and types of heat illnesses  
3 occurring in specific industries to determine whether  
4 the evidence supports promulgating additional industry  
5 specific provisions.

6 The results would be data-driven support for  
7 provisions that are feasible to implement in specific  
8 industries. As I mentioned previously, heat is a  
9 complex hazard unlike any other hazard that OSHA  
10 regulates. Addressing a hazard like heat with a one-  
11 size-fits-all approach is not workable in the electric  
12 power industry.

13 In particular, rigid provisions on issues like  
14 break times and acclimatization will be challenging and  
15 expensive to implement. More importantly, prescriptive  
16 provisions like those OSHA proposes offer little or no  
17 safety benefit. EEI member companies, many of whom  
18 worked with their labor partners at IBEW, have  
19 implemented effective programs to minimize instances of  
20 serious heat illness.

21 The time and expense necessary to implement the  
22 changes necessary to comply with the provisions of

1 OSHA's proposals serves no useful purpose. EEI filed  
2 written comments detailing its concerns with the  
3 requirements OSHA proposes, and I want to highlight  
4 just a few of the most significant.

5 While the notice of proposed rulemaking contains  
6 some information, OSHA must clearly recognize and  
7 acknowledge that each person's body responds  
8 differently to high heat. Heat levels that pose a  
9 significant risk to some individuals are not risk for  
10 others. A worker's age, physical fitness level,  
11 personal medical conditions, and a host of other  
12 factors influence the likelihood of heat illness.  
13 Despite these nuances, OSHA proposes a rigid and over-  
14 broad formula for all industries and employers, without  
15 evidence that it will be substantially -- or it would  
16 substantially reduce or eliminate heat as a workplace  
17 risk.

18 Addressing a complex problem like heat requires  
19 more flexibility and more data. Given these  
20 complexities, even a program that includes each and  
21 every element of -- OSHA proposes will not prevent  
22 every worker from experiencing heat illness. OSHA must

1 recognize explicitly that no program can prevent every  
2 heat illness, and the fact that employees need medical  
3 treatment, or time off, does not provide an employer's  
4 program -- or prove an employer's program is  
5 inadequate.

6 The goal must be to prevent serious heat-related  
7 illness by explaining the importance of water, rest,  
8 shade, and training workers about the signs and  
9 symptoms, and providing instructions on what to do if a  
10 worker or a coworker experiences them. The proposal  
11 and language in the preamble imply that a compliant  
12 program will prevent all heat illnesses, including  
13 dehydration, treated with the provision of IV fluids,  
14 or a day away from work to rest.

15 Given the nature of heat as a hazard, this is a  
16 goal that can never be met. OSHA, industry,  
17 organized - organized labor, and employees should work  
18 toward the goal of catching the early stages of heat  
19 illness before they advance to heat stroke or other  
20 serious conditions. OSHA's implication that an  
21 employer's program is not protective or compliant  
22 because a heat - a recordable heat illness occurred is

1       damaging and inconsistent with the messaging used by  
2       EEI members in communicating with employees on this  
3       issue.

4           Emergency work to restore essential services must  
5       be exempted. Power and utility outages happen at any  
6       time, often without notice, due to a variety of  
7       unplanned events, including fires, storms, equipment  
8       failure, and human error. Communities rely on EEI  
9       member companies to restore power efficiently and  
10      safely. Doing so can be a matter of life or death for  
11      hospitals, nursing homes, and similar facilities.

12          Electric power is also critical to support the  
13      emergency communications necessary during a widespread  
14      emergency. Compliance with some provisions of OSHA's  
15      proposal is not feasible during emergency operations.  
16      Our workers traveling to respond to an emergency from  
17      different climates, new or returning workers, how can  
18      the acclimatization status of thousands of workers who  
19      have traveled to the scene be tracked? How can the  
20      times at which employees must take mandatory breaks be  
21      tracked when employees are working on multi-entity  
22      teams and highly mobile?

1           If an employee needs an IV to recover from  
2           dehydration, must all work stop so that the program can  
3           be reviewed and thousands of workers retrained? Even  
4           if imposing these provisions was feasible, navigating  
5           these issues would cause significant delays in  
6           restoring essential services to the detriment of the  
7           health and wellbeing of the community.

8           The current exemption OSHA proposes for certain  
9           types of emergency work is unclear and inadequate. In  
10          at least two state OSHA plans, Maryland and Oregon,  
11          exempt all work performed to restore essential  
12          services. OSHA should do the same. Acclimatization,  
13          in this case, OSHA proposes -- or proposal offers two  
14          options for acclimatization, new and returning workers.  
15          A gradual ramp up to working in temperatures above the  
16          heat index of 80 degrees Fahrenheit, or applying high  
17          heat procedures to these workers, even at temperatures  
18          below 90 degrees Fahrenheit.

19          Tracking acclimatization status of every new and  
20          returning employee will be onerous and provide little  
21          safety benefit. Line workers at EEI member companies  
22          are typically mobile, which means strenuous work is



1 interspersed with time spent in air-conditioned work  
2 trucks, or performing administrative tasks like  
3 conducting and participating in job briefings.

4 OSHA offers no evidence establishing that the  
5 natural cadence of work is insufficient in  
6 acclimatizing employees effectively, particularly given  
7 that these employees live in the community. Mandating  
8 acclimatization systems that require individualized  
9 tracking of employees would be costly and result in  
10 little or no additional protectant -- protections for  
11 our employees.

12 Mandatory breaks every three -- or every two  
13 hours, with the heat index -- or when the heat index is  
14 90 degrees Fahrenheit or higher will lead to  
15 disruptions to the workflow of team projects, which  
16 account for the majority of work performed by EEI  
17 member companies.

18 Specifically, work must stop when a team member  
19 has worked for two hours. 30 minutes later, another  
20 employee may have to break. This cascading effect will  
21 make it difficult or even impossible to complete the  
22 work. Transitioning workers in and out of work areas

1 more than necessary will also result in safety hazards  
2 and require unnecessary exertion in hot conditions.

3 OSHA provides no evidence that the establishing of  
4 rigid break times will reduce the number of serious  
5 heat and illness -- heat illnesses in the electric  
6 power industry. Instead, OSHA's proposal assumes that  
7 employees work eight hours a day, performing the same  
8 task in high heat conditions. That is not the case.

9 As stated, electrical line work -- workers spend  
10 time performing work outdoors, riding in air-  
11 conditioned work vehicles, doing administrative tasks  
12 like job briefings, and performing many other tasks  
13 that vary in intensity.

14 The work inside power plants is similar in that  
15 employees are not continuously working in high heat  
16 areas. Three examples illustrate the lack of clarity  
17 in OSHA's proposal, as well as challenges EEI member  
18 companies would face if required to implement mandatory  
19 break provisions. The heat index reaches 90 degrees  
20 Fahrenheit at 10 a.m. A crew works outdoors from 10 to  
21 11:30, and is free to take, as needed, cool-down breaks  
22 throughout that time.

1           At 11:30 a.m., the crew leaves the job site in an  
2           air-conditioned truck and arrives at another work site  
3           at 12 p.m. Does the crew have to take a mandatory  
4           break at noon when they arrive at the second site, or  
5           is their time in the air-conditioned vehicle  
6           sufficient? If a break is required, why is that break  
7           necessary to mitigate a serious heat hazard?

8           Secondly, if an employee is up in a bucket  
9           performing work on electrical lines that involves hand  
10          work and is not strenuous, must the employee descend  
11          and exit the bucket to take a break at the precise two  
12          hour mark? How did OSHA account for the safety hazards  
13          resulting from disrupting the work task being  
14          performed, adjacent to live electrical lines, and the  
15          strain resulting from exiting and reentering the  
16          bucket?

17          Lastly, if an employee permits - or if employer  
18          permits as needed, cool-down breaks, what is the  
19          purpose of mandatory breaks at a heat index of 90  
20          degrees Fahrenheit or higher? For example, an employee  
21          takes a needed cool-down break after working 90  
22          minutes. Why is an additional mandatory break 30

1 minutes later necessary to mitigate a significant risk?

2 As we talk about retraining and program overview,  
3 OSHA proposes a mandatory review of the program and  
4 retraining anytime an employee experiences heat illness  
5 that must be recorded on an OSHA 300 log. This  
6 proposed provision assumes that any heat-related OSHA  
7 recordable justifies a review and retraining. That is  
8 not the case. The early recognition of symptoms that  
9 results in medical treatment or time away from work  
10 should be applauded, rather than viewed as negative.

11 Consider the following example. An employee  
12 working in high heat conditions feel ill -- feels ill  
13 and vomits. Based on their training, coworkers take  
14 the employee to an emergency room and an IV is  
15 administered. The employee takes the rest of the day  
16 off, and reports to work the next day, feeling fine.  
17 Under OSHA's proposal, the administration of an IV  
18 would trigger a full-blown review of the program and  
19 retraining of multiple workers.

20 This provision would require EEI members to  
21 reverse course, unless it's something completely  
22 different. Specifically, the EEI member company would

1 tell the crew that they took exactly the right steps by  
2 following their training, and this incident response  
3 was a success. Put differently, the Heat Illness  
4 Prevention Plan worked exactly as intended by  
5 preventing the employee's condition from escalating to  
6 a life-altering illness.

7 OSHA should issue a simple standard that requires  
8 water, rest, shade, and training. Any final standard  
9 OSHA issues should be limited to simple,  
10 straightforward requirements for water, rest, shade,  
11 and training. Comments from EEI and numerous other  
12 stakeholders clearly established that the prescriptive  
13 one-size-fits-all approach taken by OSHA fails to  
14 account for the nature of the work in particular  
15 industries and will require costly changes to effective  
16 programs with no corresponding safety benefits.

17 Given the unique nature of heat as a hazard,  
18 applying mandatory provisions of acclimatization, break  
19 times, and a host of other issues to multiple  
20 industries ranging from manufacturing, warehousing,  
21 construction, and retail will not be effective. OSHA  
22 also lacks the data to prove that any significant risk

1 of harm in multiple industries will be mitigated by the  
2 proposed provisions. OSHA should propose, again, a  
3 more simplified standard, review the comments, and  
4 issue a final standard.

5 These four elements are clear, proven, and easy  
6 for workers to implement, regardless of business size,  
7 operations, or industry, and will provide immediate,  
8 meaningful safeguards for employees. This streamlined  
9 approach will eliminate industry-specific issues raised  
10 by EEI and other industries as more suitable for a  
11 single standard intended to apply to many different  
12 industries.

13 By focusing on these essential elements, OSHA can  
14 promote widespread education and adoption, and more  
15 effectively protect workers working in high  
16 temperatures. OSHA can then evaluate data obtained  
17 through electronic submission of OSHA 300 logs and 301  
18 forms to better understand the risk in individual  
19 industries. A targeted evidence-based approach to heat  
20 illness prevention will identify industries with the  
21 most vulnerable workers in need of protection.

22 In conclusion, OSHA and EEI share a very common

1 goal, protecting employees from workplace hazards,  
2 including high heat. EEI member programs are effective  
3 in preventing serious hot - heat illnesses. These  
4 programs must be allowed to continue without a  
5 requirement to add provisions that would provide little  
6 or no safety benefit. EEI urges OSHA to reconsider the  
7 breadth of the proposed standard, and issue a  
8 simplified standard focused on water, rest, shade, and  
9 training, while continuing to study industry-specific  
10 pattern. Thank you.

11 JUDGE BELL: Thank you, Mr. Payton.

12 Questions from the OSHA room?

13 MR. LEVINSON: Yes, Your Honor. Andrew Levinson  
14 for OSHA.

15 Mr. Payton, thank you and EEI for your testimony  
16 and -- and comments. Several folks have talked about a  
17 need for a performance-oriented standard, rather than  
18 the prescriptive approach that -- that we've taken.  
19 You talked about water, rest, and shade, and focusing  
20 on that and training. Either now, or in post-hearing  
21 comments, any thoughts you have on how we could write  
22 such a standard would be greatly appreciated.

1           For example, how should the agency express a  
2           requirement for rest breaks? In particular, some folks  
3           have talked about saying rest breaks as needed could  
4           lead to abuse by some folks, but if we provided  
5           something where there is a more specific time frame, as  
6           we heard you say, there might be a greater hazard of  
7           having to stop work at certain prescribed times. So  
8           your thoughts on how we could accomplish that would be  
9           greatly appreciated.

10           MR. PAYTON: Definitely, and that's something that  
11           we'd be more than happy to provide during the -- the  
12           rest of the comment period to help craft that language.

13           MR. LEVINSON: Thank you.

14           The next questions come from Jonathan Berr in the  
15           room.

16           MR. BEARR: Thank you.

17           Jonathan Berr, Directorate of Standards and  
18           Guidance. In your written comments, you noted that the  
19           preference for your organization is to maintain using  
20           as-needed breaks for overheated crews to cool down. Is  
21           there any chance you could discuss, you know, that one  
22           situation that you did mention if a - if a crew member



1 is doing a rather critical task, a dangerous task, and  
2 is in need of a break, how do current practices among -  
3 among your membership - what's the current practice of  
4 using that as-needed break?

5 MR. PAYTON: So I can't speak for all of the  
6 member companies; I can just speak for Center Point.  
7 In those situations, it would be to definitely observe  
8 the -- the crew as they're performing the work,  
9 understand their current condition, understanding when  
10 was the last time they had a break before they started  
11 to perform the work, and determining a safe point at  
12 which they could stop if it's determined that they now  
13 should have a cool-down break, and -- and you know, get  
14 them to a safe point to be able to stop the work before  
15 they were to come down if they were working in heights  
16 from a bucket.

17 And so I know a number of member companies  
18 approach it this way. I do not know specific time  
19 frames, if they use any. For -- from Center Point's  
20 perspective, we look at it versus a -- or we look at it  
21 from a time period where, if they've been conducting  
22 work for several hours, and they haven't had a break,

1        then now, the job leader on site would make a  
2        determination, and speak with workers, and currently --  
3        and -- and constantly be assessing their -- their  
4        condition as they're performing the work, and  
5        determining a safe place at which that crew could stop  
6        and come down to take a break.

7                So it's -- it's really a combination of -- in the  
8        training, helping them understand the times at which  
9        they should be looking for signs and symptoms of  
10       heat -- heat stress. And then, also understanding, as  
11       they're performing the work task, at what portions of  
12       that task is it most critical to make sure that we  
13       continue the work, or is this a great opportunity to  
14       break, and -- you know, take a break to -- to cool down  
15       in that situation.

16               MR. BEARR: Thank you. One more question. You  
17       did mention in the written comments that -- that your  
18       experience demonstrated that as-needed breaks are an  
19       effective tool in preventing heat illness. I was  
20       hoping that either now or in post-hearing comments you  
21       could further describe about the length of time, the  
22       frequency of these as-needed breaks that are used by

1 employees in your member -- in the member companies.  
2 And then, if it's possible, provide information about  
3 the percentage of employees within these organizations  
4 that use these as-needed breaks, as well -- one more  
5 question. Is this in addition to any other types of  
6 breaks, such as lunch breaks, or other scheduled rest  
7 periods?

8 MR. PAYTON: So to answer your last question  
9 first, cool-down breaks are in addition to -- at least,  
10 for Center Point Energy, and most -- most of the peers  
11 that I'm aware of, their programs. And to answer your  
12 question also around gaining additional information,  
13 one of the things we're currently doing is pulling  
14 together programs that our peer companies would be  
15 willing to share with OSHA so that they could see  
16 specific information and how they manage those  
17 particular types of situations, but -- I think that  
18 answers the questions I heard.

19 MR. BEARR: Yeah, that'd be great. Thank you.

20 MR. LEVINSON: Your Honor, the next questions come  
21 from Jason Hammer, who's joining us online.

22 MR. HAMMER: Hi. Excuse me.

1 Jason Hammer from the Directorate of Standards and  
2 Guidance. Thank you for your testimony. I just have  
3 one question related to the Heat Injury and Illness  
4 Prevention Plan. In your written comment, you  
5 discussed some concerns with the heat safety  
6 coordinator role, including different scenarios, asking  
7 OSHA's opinion on what to do if the heat safety  
8 coordinator was out sick, there was turnover in those  
9 situations. So either now, or in post-hearing  
10 comments, we'd be interested in hearing any information  
11 on what member companies do now, if a supervisor,  
12 foreman, or anyone in a similar role is on leave, and  
13 if you have any alternatives you might suggest for the  
14 heat safety coordinator role requirement, and if you  
15 can explain why?

16 MR. PAYTON: Sure. Well, we will definitely  
17 gather information from peer companies to be able to  
18 give you a consolidated response.

19 MR. HAMMER: Thank you.

20 MR. PAYTON: Again, for the -- the comments that  
21 were submitted, that was based upon member companies'  
22 consolidation of comments related to the standard. So

1 we will pull that information together and share that  
2 with OSHA.

3 MR. HAMMER: Great. Thank you. We appreciate it.  
4 That's it for me.

5 MR. LEVINSON: Your Honor, the next questions come  
6 from Dalton Moore here in the room.

7 MR. MOORE: Hey. Dalton Moore, Directorate of  
8 Enforcement Programs. I just have a -- a quick  
9 question about your comment about suitably cool water,  
10 and I was hoping you can, kind of, like, explain that a  
11 little bit. Like, what exactly, you know, -- what are  
12 you referencing?

13 MR. PAYTON: I don't quite recall specifically  
14 where that comment was made.

15 MR. MOORE: Gotcha. It - it - it's - you can -  
16 you can address it in post-hearing too, but it was  
17 just - just basically, trying to gather, like, a  
18 specific temperature range for drinking water. For  
19 instance, to make sure that we can cite compliant  
20 flexibility. We've heard the opposite from some other  
21 witnesses and some commenters that the term suitably  
22 cool is vague, and just kind of like to get your

1 opinion on what that would mean for you and your member  
2 organizations.

3 MR. PAYTON: Okay.

4 MR. LEVINSON: Is there any --

5 MR. PAYTON: We will go back and review that  
6 comment and provide further information to help support  
7 that.

8 MR. LEVINSON: Your Honor, the next question comes  
9 from Patti Downs, who is joining us online.

10 MS. DOWNS: Hi. Patti Downs with the Directorate  
11 of Standards and Guidance.

12 In the written comments submitted, it mentioned  
13 that some members mandate breaks when air temperatures  
14 reach their heat illness prevention plan's targeted  
15 temperature threshold. Can you tell us what that  
16 threshold is, and does that get reevaluated based on  
17 the results or if there happens to have a heat-related  
18 incident?

19 MR. PAYTON: So I can tell you that that threshold  
20 is something that can vary from company to company.

21 MS. DOWNS: Uh-huh.

22 MR. PAYTON: Different companies use different

1       temperatures, and that's based upon different resources  
2       that they use to build their programs. I think that  
3       may be something you might be able to see in some of  
4       the -- the programs that could be shared with OSHA. As  
5       far as would it be reevaluated, member companies like  
6       Center Point, we -- we reevaluate our programs  
7       typically on an annual basis, you know, and we use,  
8       again, data to help support, you know, what we're  
9       doing, any opportunities for improvement.

10           And a number of our peer companies, we're aware  
11       that do the same thing. So understanding climates  
12       change, you know, conditions change, and there's  
13       opportunities for improvement. So those are definitely  
14       things that I know a number of our peer companies do is  
15       to review their programs based upon the -- the evidence  
16       and -- as we were encouraging OSHA to look at, you  
17       know, recordable data to see whether or not their  
18       program or the program is effective.

19           MS. DOWNS: Okay. Great, great. Any information  
20       you could share additionally in the post-hearing brief  
21       would be appreciated. Thank you.

22           MR. PAYTON: You're welcome.

1           MR. LEVINSON: Okay. Mr. Payton, I had a question  
2           related to your statement that you believe that  
3           restoration of power during post-storm operations or  
4           other -- other sorts of scenarios should be exempted.  
5           And I'm curious. One can easily imagine that in those  
6           situations, workers would be asked to either work  
7           faster, harder, longer than they would otherwise  
8           because of the pressures to restore power. So how do  
9           you assure the safety of those workers in those  
10          scenarios with respect to heat?

11          MR. PAYTON: I can tell you, based on my  
12          experience in the industry, heat particularly - I'm  
13          based in Houston. It is something that during every  
14          restoration activity is one of the primary hazards that  
15          we are speaking with not only our employees about, but  
16          responding mutual aid companies, and sharing, you know,  
17          messages around the expectation that employees are  
18          taking breaks, that they're properly hydrating, that  
19          they're getting the appropriate rest, whether it be at  
20          work, during cool-down periods, or when they're away  
21          from work during their time off.

22          It's part of our response, and it's part of the



1 way that we do business, even in -- on blue sky days,  
2 is to ensure that employees understand that we want to  
3 restore power safely. And I can tell you, based upon  
4 my years in this industry, during restoration  
5 activities, that is the time when a lot of our workers  
6 are working at -- at their safest levels.

7 Their -- their awareness is, I would say, very  
8 high, and we see, really, better performance from a  
9 safety perspective in those times, really, given the --  
10 the nature of the situation. So the -- the programs  
11 that a lot of member companies have are really designed  
12 to be portable. And so they're carrying those programs  
13 with them, and it's something that they're continuing  
14 to enforce, even when they're operating in a different  
15 area.

16 Speaking to that specifically, storms we had last  
17 year, we had a - a mutual assistance contractor, Roth,  
18 and they - they brought their program with them. And  
19 it was really, really great to see how the employees  
20 were following their program, you know, even though  
21 they were outside of their normal operation area.

22 MR. LEVINSON: Thank you. Also related -- I guess

1 not directly related to emergency events, but when  
2 there's a potential heat emergency, and somebody needs  
3 rapid cooling, in your comments EEI talked about  
4 financial and logistic challenges of providing rapid  
5 cooling for people, particularly in mobile workforces.  
6 Can you talk a little bit more about those challenges  
7 and/or how you would address such a situation?

8 MR. PAYTON: So being prepared for - for heat  
9 illnesses, one of the things that's always done in the  
10 electric utility space, particularly for our mobile  
11 workforce, is to be able to identify the closest  
12 emergency medical facility. It's part of our pre-job  
13 briefing assessments. Understanding where we're  
14 located, how long it would take to get help for that  
15 individual is truly a part of what we do every day in  
16 an electric utility industry.

17 As far as some of the challenges with the rapid  
18 cooling, it's having places to actually store -- and I  
19 had an opportunity to listen to the testimony from the  
20 gentleman with the railroad earlier. And very similar,  
21 our workers go many miles away from their base  
22 location.

1           And so being able to carry and maintain equipment  
2           on a vehicle to help support rapid cooling is something  
3           that could be a challenge, not to mention how, you  
4           know -- how many of the units would be necessary, or  
5           how many of the pieces of equipment, maintenance,  
6           upkeep, and -- and those are things that would  
7           definitely be onerous for utility companies to have to  
8           manage.

9           And so from that perspective, you could see how if  
10          I've got a hundred line trucks that are going out every  
11          day, and a system would need to be available for each  
12          of those because they're working in different  
13          locations, the maintenance, the cost, the upkeep would  
14          be something that would have to be considered by the  
15          utility company that would have to - to maintain  
16          those - purchase and maintain those.

17          But that's just a -- a basic example. The -- the  
18          other piece would be how or what type of equipment  
19          would meet the expectations for OSHA in that situation.

20                 MR. LEVINSON: Thank you.

21                 And the last question from OSHA comes from Rachel  
22          Carse, who's joining us online.

1 MS. CARSE: Hi, this is Rachel Carse. Can you  
2 hear me now?

3 MR. PAYTON: Yes.

4 MS. CARSE: Mr. Payton, I just talked a little bit  
5 about some of the cost constraints with the cooling  
6 interventions, but if there are any other specific cost  
7 estimates that you could provide to us for the  
8 different requirements, we would appreciate that.  
9 Including specific cost estimates for emergency cooling  
10 interventions, and if possible, in a post-hearing  
11 comment.

12 MR. PAYTON: Yes, ma'am.

13 MS. CARSE: That's all.

14 MR. PAYTON: Thank you.

15 MR. LEVINSON: Thank you, Your Honor. That  
16 concludes OSHA's questions.

17 JUDGE BELL: Any questions from the Solicitor?

18 MS. WILES: Thank you, Your Honor. Linda Wiles  
19 from the Solicitor's Office. I don't have any  
20 questions.

21 Thank you, Mr. Payton, for being here, and for  
22 your testimony.

1 MR. PAYTON: Thank you, all.

2 JUDGE BELL: Do we have any questions for Mr.  
3 Payton?

4 MS. CARLON: There are none, Your Honor.

5 JUDGE BELL: All right.

6 Mr. Payton, thank you very much for your  
7 testimony. It's been very helpful.

8 MR. PAYTON: Thank you.

9 MS. CARLON: The next speaker group is the  
10 International Safety Equipment Association, represented  
11 by Lexi Engelbart, Daniel Glucksman, Saif Islam, Kayla  
12 Stevens, and Bubba Wolford.

13 Please state your name and associate --  
14 affiliation -- excuse me -- as you move throughout your  
15 testimony. Thank you.

16 MR. GLUCKSMAN: All right. Thank you.

17 So Your Honor and OSHA staff members, I'm Dan  
18 Glucksman with the International Safety Equipment  
19 Association, or ISEA, whose members design, test,  
20 manufacture, and supply a wide range of personal  
21 protective equipment and safety equipment, including  
22 personal cooling solutions.

1           At least 125 million American workers are  
2           protected by PPE and safety equipment, and ISEA  
3           research shows over 90 million Americans -- American  
4           workers that is, are impacted by heat stress. ISEA is  
5           accredited by the American National Standards Institute  
6           to develop consensus standards. OSHA references some  
7           of our standards, including the Z87.1 for safety  
8           eyewear, Z89.1 for head protection, and Z308.1 for  
9           workplace first aid kits. In fact, all will be updated  
10          later in 2025.

11          Within the next three-and-a-half years, OSHA could  
12          publish a final heat stress rule. OSHA seeks to  
13          prevent heat injuries, illnesses, and fatalities with a  
14          rule that makes work safe for employees and is  
15          straightforward and manageable for employers. Cooling  
16          PPE, as OSHA calls it, must be part of the final rule,  
17          either as a required component of the Heat Injury and  
18          Illness Prevention Program, as the current proposed  
19          rule calls for, or as part of an allowable part of a  
20          heat stress program under a performance-based flexible  
21          approach.

22          One study showed that workers wearing cooling PPE

1 experienced a 50 percent reduction in heat-related  
2 illness. There have been discussions of the various  
3 types of cooling PPE, and there are generally two  
4 types, passive and active. Passive cooling solutions  
5 use textiles that accelerate the body's natural cooling  
6 mechanisms through evaporative cooling, radiative  
7 cooling, and other methods.

8 Sweat-wicking garments are the most common type of  
9 passive cooling. These are made of fabrics that  
10 contain textile fibers that absorb water or sweat, as  
11 well as fibers that push it away from the body. This  
12 helps to optimize our natural cooling mechanism, which  
13 is by sweating. These types of PPE are appropriate for  
14 indoor and outdoor environments. Active cooling PPE  
15 includes cooling towels, bandanas, and vests that are  
16 specially designed to help alleviate heat burden.

17 These are high-tech, economically feasible items  
18 that are increasingly common in heat stress management  
19 programs. Some vests include phase change materials,  
20 help remove heat from the worker's body while staying  
21 at a constant temperature. Other vests use evaporative  
22 cooling technology to those working outside in non-

1 humid environments. Cooling towels and bandanas as  
2 well as phase change material vests are appropriate for  
3 indoor and outdoor environments.

4 Evaporative cooling vests are best for outdoor  
5 environments that have low humidity. PPE already  
6 incorporates a wide variety of technology, and that's  
7 only increasing. We'll see a wide variety of  
8 technology-enabled worker safety options coming into  
9 this space in the relative near term. Also, during the  
10 hearing, there were a few questions and comments about  
11 the effectiveness of cooling PPE.

12 I'd like to address some of these comments by  
13 highlighting studies that have demonstrated the  
14 effectiveness of cooling PPE. Dr. Roxana Chicas  
15 published two studies on heat-stress PPE. A  
16 quantitative study in 2020, and a qualitative study in  
17 2021, which OSHA references in its proposed rule. Both  
18 studies, both the quantitative and the qualitative  
19 study, we believe, demonstrate cooling PPE is  
20 effective, and has the support of non-managerial  
21 workers.

22 Dr. Chicas studied agricultural workers in Central



1 Florida. Her study notes the workers were provided  
2 with - this is a bit of a mouthful, but the Hyperkewl  
3 Evaporative Cooling Vest, Hybrid Elite Sport Vest.  
4 This vest is advertised as an active cooling vest for  
5 athletes and generally requires good air flow, so it's  
6 very likely not the most appropriate for this type of  
7 work environment.

8 (AUDIO MALFUNCTION).

9 But even still, workers wearing these vests and  
10 cooling bandanas had optimal heat stress outcomes. In  
11 fact, Chicas' quantitative study from 2020 states,  
12 quote, "Workers using cooling vests and bandanas had  
13 the highest proportion of participants reporting no  
14 heat-related illnesses". Also, in her 2020 study,  
15 writes that, quote, "The bandana was protected against  
16 heating at a core body temperature 38 degrees Celsius."

17 This makes sense because cooling bananas are  
18 appropriate across a wide range of workplace  
19 environments, including the type in Chicas' study. And  
20 I'll note 38 degrees Celsius equates to a 100.4 in  
21 Fahrenheit. Dr. Chicas' qualitative study -- or in her  
22 qualitative study, she wrotes -- writes that all the

1 test subjects were, quote, "In agreement that the vest  
2 did keep them cool", end quote.

3 And when asked what practices employers should  
4 implement to protect them from heat stress, their  
5 answers included, quote, "Personal cooling gear  
6 interventions," unquote. We believe her studies show  
7 that cooling PPE makes work safer for workers.

8 Cooling PPE was also demonstrated to be effective  
9 in a heat stress prevention study conducted by a St.  
10 Louis foundry in 2016. That year, the company treated  
11 38 cases of heat illness across three shifts. Since  
12 air-conditioning would be impracticable, the company  
13 conducted a study where workers were provided with  
14 cooling vests. The study ran for 14 months. During  
15 that time, there were no heat stress cases in the first  
16 and second shifts. I don't have data on the third  
17 shifts, and the foundry does run three shifts.

18 Let me offer an example of how cooling PPE and  
19 electrolyte replenishment are currently implemented  
20 into a company's operations. At UPS, the company, along  
21 with the Teamsters Union, created a new heat stress  
22 plan. UPS provides cooling gear such as hats and

1 sleeves, protective sleeve - or cooling sleeves -  
2 protect the exposed skin from the sun.

3 When (AUDIO MALFUNCTION) these sleeves offer an  
4 hours long fully effect, and when they're used dry,  
5 they absorb sweat and wick moisture away. The company  
6 also provides electrolyte beverages to its workforce.  
7 The company instructs employees to, quote, "Get plenty  
8 of electrolytes and avoid drinks containing lots of  
9 sugar", unquote. But I should note, UPS and FedEx are  
10 some of the largest providers of electrolyte  
11 replenishment beverages to their respective workers.

12 ISEA recommends both to use the hierarchy of  
13 controls because cooling PPE is not designed to be a  
14 one stop heat stress solution. And as I have said  
15 elsewhere, as with other types of - other types of PPE,  
16 when employers select cooling PPE as part of an OSHA  
17 compliant heat stress protection plan, it's expected  
18 that the appropriate PPE will be selected.

19 Let me speak for a second about electrolytes. The  
20 proposed rule's preamble discusses the hazards of not  
21 replenishing electrolytes, but the proposed rule is  
22 silent on the topic - the proposed rule text, rather.

1 It's silent on the topic. Electrolyte loss from  
2 sweating can cause dehydration, heat exhaustion, and  
3 heat stroke, conditions that can be life-threatening.

4 Electrolyte imbalance can lead to fatigue,  
5 confusion, cramping, and poor decision making, which  
6 increases the risk of accidents. But proper hydration  
7 with electrolyte beverages helps maintain alertness and  
8 physical capacity, which minimizes accidents. Also,  
9 water alone does not replace electrolytes critical to  
10 the muscle, nerve, and kidney function.

11 We believe OSHA should follow NIOSH's  
12 recommendation on electrolyte replacement beverages  
13 from their 2016 criteria document, which states, quote,  
14 "During prolonged sweating, lasting more than two  
15 hours, employees should be provided with drinks that  
16 contain balanced electrolytes or replace those lost  
17 during sweating, as long as the concentration of  
18 electrolytes to carbohydrates does not exceed eight  
19 percent by volume", unquote.

20 The NIOSH 2016 criteria document also says workers  
21 can replace electrolytes with food, but our belief is  
22 that not all employees will bring enough food, or

1 perhaps the appropriate food to replenish electrolytes.  
2 It's with this state - with this comment, we don't  
3 quite see eye to eye with NIOSH.

4 Also, OSHA's final rule should generally follow  
5 Washington state's heat stress regulation to include  
6 electrolyte replacement in the definition of water.  
7 OSHA should define drinking water similar to Washington  
8 state's reg as follows: Quote, "Drinking water means  
9 potable water that is suitable to drink and is suitably  
10 cool in temperature. Other acceptable beverages  
11 include drinking water packaged as a consumer product,  
12 and electrolyte-replacing beverages that do not contain  
13 high amounts of sodium, sugar, or caffeine."  
14 Electrolyte replenishment is also recommended by OSHA,  
15 ACGIH, and in ASF - ANSI/ASSP A10.50. In the SBREFA  
16 panels, a number of small employers state they offer  
17 electrolyte replacement beverages.

18 So to conclude, 92 million workers in the U.S. are  
19 impacted by heat stress, 170,000 workers are injured  
20 each year due to heat stress. Effective heat stress  
21 management programs reduce heat-related illness by 90  
22 percent and worker comp costs by 50 percent, and

1       cooling PPE needs to be a part of every heat stress  
2       management program as workers wearing cooling PPE  
3       experience a decrease in heat-related illness of up to  
4       50 percent.

5               Thank you for your attention, and we are now happy  
6       to answer questions.

7               JUDGE BELL: Mr. Glucksman, thanks for your  
8       testimony.

9               Questions from the OSHA room?

10              MR. LEVINSON: Yes, Your Honor. Andrew Levinson  
11       for OSHA.

12              Mr. Glucksman, thank you for your testimony and  
13       for ISEA's testimony. I've got a couple of questions.  
14       OSHA has heard from many people about a desire to  
15       switch from a specification-oriented standard to a  
16       performance-oriented standard. One of the things that  
17       I'm curious about is biomonitoring equipment for heat  
18       stress. Are any of those people members of your  
19       association or does ISEA have knowledge of such  
20       equipment?

21              MR. GLUCKSMAN: In answering that - let me ask if  
22       other members of the panel want to answer, but very

1 quickly, no. They are not members of ISEA. However,  
2 there are a couple of members that have - that related  
3 note - technology that can be attached to certain PPE  
4 to let responders know - know about an incident and  
5 like, the impact a worker may have received. And I say  
6 that because technology is coming quickly, and - and if  
7 we do have members that enter this space, we'll  
8 certainly make sure we connect them with you and your  
9 (AUDIO MALFUNCTION).

10 MR. LEVINSON: So -- all right. Let me go in a  
11 slightly different direction. You mentioned the role  
12 of cooling -- PPE with cooling technology. If OSHA  
13 went in a performance-oriented direction, how would one  
14 know when either enough cooling PPE had been provided  
15 so that rest breaks were not needed, or when the  
16 cooling PPE was no longer effective, and either need to  
17 be replaced or replenished in some fashion?

18 MR. GLUCKSMAN: Yeah, let me take a quick stab at  
19 that, but also, can hand it off to Lexi, Kayla, and  
20 Saif.

21 In the first part of your question, you know, as  
22 we said, we don't think that cooling PPE, or in some

1       ways any PPE is a -- is a one-stop shop. It's often  
2       designed to be part of, you know, the hierarchy of  
3       controls. In the other part of your -- your question,  
4       I'll reference some of the things in the -- in the  
5       statement, and then, I'll let -- can respond as well.

6           I think that workers are, you know, essentially -  
7       they know when, you know - when to, like, change out  
8       PPE. It's also part of education. So in this case,  
9       ideally, the PPE you would be part of, you know, a - a  
10      heat stress program - can be trained on and  
11      communicated, such that the cooling vest either need to  
12      be put underwater again, or phase change materials need  
13      to be changed out that those would be, kind of,  
14      available, and workers would know when to do that.

15           But let me hand it off to the panel, who has got  
16      more experience with end-users who could perhaps share  
17      this. But I think Lexi is ready to speak.

18           MS. ENGELBART: Hi, good afternoon. This is Lexi  
19      Engelbart with ISEA, for the record. So to - speaking  
20      to Daniel's point a little bit further, a lot that has  
21      to come down with choosing cooling PPE is understanding  
22      the environment, humidity levels, air flow levels,



1 other required PPE that would be required as part of  
2 the job. Understanding those factors will help an  
3 employer choose, really, the right effective PPE.

4 And as far as, you know, the amount of time that  
5 it'll cool, or the duration, or when to activate again,  
6 a lot of that does kind of roll into the training  
7 aspect of a heat management program. So understanding,  
8 you know, the signs and symptoms of heat illness, but  
9 also understanding how the PPE and the technology that  
10 is being used works, when it will be done, and how to  
11 reactivate the PPE.

12 MR. LEVINSON: And I guess, just as a follow up.  
13 Do the manufacturers generally provide adequate  
14 instructions on the limits of the technology?

15 MS. ENGELBART: Again, Lexi Engelbart for the  
16 record. So cooling testing has definitely been coming  
17 a long, long way within recent years. Obviously, with  
18 the NEP putting - be - been put in place, there's a lot  
19 more focus on claims, cooling time, how much it is, you  
20 know, offloading heat from the body. I would say there  
21 is still probably some room to go as far as a more  
22 universal system for all manufacturers to be able to

1 reference. You know, there's a - there's a couple  
2 different cooling tests that can be performed today,  
3 but they don't necessarily apply to all technologies,  
4 all fabrics, and all ways of - all devices for cooling  
5 PPE. So I think that that still has some - some room  
6 to go, I would say.

7 MR. LEVINSON: Thank you.

8 The next question comes from Dalton Moore.

9 MR. MOORE: You know, I think a lot of my  
10 questions were -- were answered actually, but I would  
11 like to know your thoughts on -- as far as, like, how  
12 are employers determining safe working conditions when  
13 you're wearing, like, impermeable clothing? Like, when  
14 you're wearing non -- PPE that's not breathable?

15 MR. GLUCKSMAN: Kayla, go ahead.

16 MS. STEVENS: Yeah. This is Kayla Stevens with  
17 ISEA, for the record.

18 I would say, honestly, right now, that is not  
19 something that is considered or factored in, which is  
20 precisely why this is so important. When we start  
21 talking about PPE, PPE product is quite heavy, and  
22 thick, and to your point, not very breathable. So

1       trying to understand what we can do to counteract that  
2       lack of breathability, lack of cooling, it almost --  
3       it -- it makes your extreme heat environment a little  
4       bit worse, but you still need that primary PPE. So by  
5       implementing a rule, we would be able to really start  
6       taking a look at how we can mitigate some of those  
7       factors that enhance heat stress.

8               MR. MOORE: Okay. This is Dalton Moore for OSHA -  
9       from OSHA again. I'm sorry. And just - another  
10      question would be, your experience with any  
11      biomonitoring with any type of - have you - what do -  
12      what's your experience seeing that in the field?

13             MR. GLUCKSMAN: Saif, go ahead.

14             MR. ISLAM: Hi. Saif Islam for ISEA here.

15             So there's a number of commercial example for  
16      body -- heat stress index monitoring that are available  
17      there. One of the example I can provide is Core 2 a --  
18      a solution that -- that one of the tier of the product  
19      actually can assess and monitor a continuous heat  
20      stress index, which is basically a ratio of skin  
21      temperature and core temperature.

22             A - it widely used for athletes, but then, an

1 advanced version is also available called CALERA  
2 Research. There's a number of research-focused sensors  
3 and biometric sensors available that can be used for  
4 commercial example as well, with HyperChrome, it was  
5 back in the days. It was also used by NASA, but  
6 they're very -- Core 2 is one of the widely - easy to  
7 use sensors that you can actually use - attach to  
8 your - as - as - as a strap, and on your armpit, and  
9 does a very good job on monitoring your body heat  
10 stress indexes.

11 MR. GLUCKSMAN: Saif --

12 I should tell the OSHA panel. These - the  
13 companies that Saif just mentioned aren't members, but  
14 I'm wondering if you could just say them. I know the  
15 transcriptionist will probably ask anyway. Just again,  
16 a little bit slower so that the transcriptionist can  
17 cover them.

18 MR. ISLAM: Yeah, absolutely. So the technology  
19 is called Core 2. It's a solution is from greenteg.  
20 A -- it's a -- it's sensor-based solution which tracks  
21 the heat stress index. It's a ratio of heat -- skin  
22 temperature and body core temperature. One of the

1 fundamental heat stress index, and it's very easy to  
2 use. You can attach it on -- on the body using a strap  
3 or a medical grade adhesives, and there are tons of  
4 number of other commercial examples out there that we  
5 can -- I can add on the post-hearings --

6 MR. GLUCKSMAN: Great.

7 MR. ISLAM: -- comments. Thank you.

8 JUDGE BELL: Thank you.

9 MR. LEVINSON: The next questions come from Patti  
10 Downs, who is joining us online.

11 MS. DOWNS: Hi. Patti Downs with the Directorate  
12 of Standards and Guidance. I'm just going to keep the  
13 ball rolling with the discussion of cooling PPE, right?  
14 You guys mentioned it a little bit in response to,  
15 like, the vapor impermeable PPE. I'm curious to know  
16 if there's any cooling PPE available that could be used  
17 with, like, FR, fire-rated clothing, as well?

18 MR. ISLAM: I can --

19 MR. GLUCKSMAN: Go ahead, Saif.

20 MR. ISLAM: -- give some examples. So they're not  
21 PPE. There -- there's a fundamental concepts of -- the  
22 cooling PPE are -- you can divide -- classify them into

1 passive and active. And some of the fundamental  
2 methods within the passives are radiative cooling,  
3 evaporative cooling, conductive cooling.

4 Radiative cooling is basically a material --  
5 cooling PPE's ability to reflect solar, near infrared  
6 and visible light, thus ensuring that we absorb less  
7 solar heat, and -- and increase -- reduce the heat  
8 stress.

9 MS. DOWNS: Okay.

10 MR. ISLAM: And then, evaporative cooling, there  
11 are a number of example, like, Coolcore and HeiQ Smart  
12 Temp. They have option in the fire as well. And  
13 Kayla, you have some examples if you like, though.

14 MS. STEVENS: Yeah. Kayla Stevens with ISEA. I  
15 just want to add on to that. Yeah, there are FR  
16 cooling solutions. So we're now seeing a lot more  
17 filament based FR fibers, which is how we ultimately  
18 achieve that cooling performance. And that technology  
19 is really, really ramping up in the FR space, so  
20 definitely should be one of the focal points here.

21 MS. DOWNS: Okay. Great. Thank you. And then,  
22 Patti Downs with OSHA again.

1           OSHA has received some comments that shade is not  
2           feasible for some employees who work in highly mobile  
3           areas. Are you aware of any shade alternatives  
4           available for mobile work crews? And if so, can you  
5           just describe some of those options?

6           MR. GLUCKSMAN: Go ahead, Lexi.

7           MS. ENGELBERT: Lexi for the record, Lexi  
8           Engelbart.

9           So there are a number of solutions that exist.  
10          There are pop-up tents that you'll, kind of, see a lot  
11          of different places. Construction sites use them.  
12          You'll see them at fairs, markets, that sort of thing.  
13          It's a pretty standard pop-up tent that's great for,  
14          you know, a crew of maybe two or more people.

15          For even a smaller work site, though, there are  
16          umbrella options that can be mounted into a truck hitch  
17          or you know, put into a stand, staked into the ground.  
18          There are a lot of different options as far as  
19          temporary shade goes, so think -- think -- in the  
20          market, both within safety, and then, kind of within  
21          more of the end-user, kind of, regular, non-working  
22          market, there are a lot of shade options that are

1       feasible from a cost perspective, as well as  
2       feasibility and actually installing.

3               MS. DOWNS:   Okay.

4               That was all for me, Andy.   Thank you.

5               Thank you, everyone.

6               MR. LEVINSON:   Thank you.

7               And the last question, Your Honor, comes from  
8       Rachel Carse, who's joining us online.

9               MS. CARSE:   Hi.   This is Rachel Carse from OSHA.  
10       In your written comments, you talked about how  
11       extensively cooling PPE is being used in outdoor  
12       environments already.   If you have any data or  
13       information on the specific industries that utilize  
14       this PPE, such as information on the industry itself,  
15       the estimated share of employers that use the PPE, and  
16       you can provide that to us, that would be helpful.  
17       Additionally, if you have any information on the  
18       average cost of the most commonly used PPE, and you can  
19       submit that into the record, we would appreciate that.

20              MR. GLUCKSMAN:   Sure.   Rachel, I think that we  
21       could give you some anecdotes right now on industries  
22       that - it's, sort of, the most common industries that



1 use certain PPE, and I'm wondering if anyone on our -  
2 the ISEA panel could offer just a few anecdotes of what  
3 they see as common use for right now?

4 MS. STEVENS: Absolutely. Kayla with ISEA again.  
5 I can at least touch on some more passive options here.  
6 I would say -- so there's really no definitive form of  
7 PPE that is -- that -- that can make a claim to reduce  
8 heat stress today. Within the athletic apparel space,  
9 there is a lot -- a lot of cooling fibers that are  
10 used, a lot of cooling chemistries that we could  
11 leverage for some of these opportunities. But as far  
12 as a regulation or -- or a true form of PPE, there's  
13 nothing in this space that is -- is -- is actually  
14 regulated today.

15 MR. GLUCKSMAN: But --

16 MS. CARSE: Go ahead.

17 MR. GLUCKSMAN: -- but to look at -- I'd answer it  
18 in our post-hearing comments.

19 MS. CARSE: Okay. Thank you.

20 MR. LEVINSON: Your Honor, that --

21 MS. CARSE: That's it.

22 MR. LEVINSON: -- concludes the questions from --

1               Sorry. Rachel, did you have another one?

2               MS. CARSE: No, I was just saying that's all.

3               Sorry.

4               MR. LEVINSON: All right.

5               Your Honor, that concludes the questions from  
6 OSHA.

7               JUDGE BELL: Any questions from the Solicitor?

8               MS. WILES: Thank you, Your Honor. Linda Wiles  
9 from the Solicitor's Office. I don't have any  
10 questions.

11              Thank you so much for being here today.

12              JUDGE BELL: Are there any other questions for  
13 this panel?

14              MS. CARLON: Yes, Your Honor. There is one from  
15 Mr. Cannon.

16              Please state your name for the record.

17              MR. CANNON: Hi. Kevin Cannon, Associated General  
18 Contractors of America.

19              Thanks, Dan and team, for your testimony.

20              Dan, you talked a lot about cooling PPE, and  
21 technology, and such. What -- what are other types of  
22 tech coming to PPE and safety equipment that you might

1 be able to speak to?

2 MS. STEVENS: Okay if I jump in, Dan?

3 MR. GLUCKSMAN: Sure, go ahead, Kayla.

4 MS. STEVENS: Kayla Stevens with ISEA.

5 So again, want to touch on some of the passive  
6 heat stress solutions and technologies, and then, I'll  
7 pass it to a colleague to speak to more of the active  
8 solutions. So technology today within the textile  
9 space has really come a long way, and we're at a really  
10 great place where we can manufacture - we can  
11 manufacture apparel that truly reduces heat stress in  
12 extreme heat environments.

13 There is construction, yarn technologies, fabric  
14 finishes, and the combination of all of these  
15 components within a material and apparel. You can  
16 develop products which manage components like  
17 breathability and drying time, evaporative cooling. So  
18 there's many factors we can quantify through the use of  
19 those fabric technologies.

20 And I -- we believe truly that a combination of  
21 such factors will greatly reduce heat stress in extreme  
22 heat environments, both indoors and outdoors. So

1       that's just high-level when it comes to more passive  
2       fabric-based solutions.

3               But I'll turn it to my colleague, Saif, with more  
4       detail, if he has anything?

5               MR. ISLAM: Thanks, Kayla.

6               Saif Islam from ISEA here. So as Kayla was saying  
7       that there is a -- a number of options in the passive  
8       world and active world to -- cooling PPE world, too,  
9       that works very effectively. But then, the idea is  
10      that they work together and supplements the cooling  
11      efficiency of each other. For an example, with  
12      passive, the -- the number of functions and  
13      principles -- the radiative cooling, for an example, I  
14      was sharing earlier.

15              The fundamental is -- is to reflect most of the  
16      near infrared, and visible light, and the heat  
17      associated with it. Some examples are far infrared,  
18      solar free, and solar coal black. They does pretty  
19      good job to reduce the heat absorption from sun. Then  
20      in -- in addition to that, evaporative cooling, for  
21      example, is quite effective by cooling off -- they cool  
22      off the body by absorbing water into a textile clothing

1 or vest material which then evaporates gradually,  
2 removing heat from the body through a latent heat  
3 evaporization.

4 Some of the examples are Polar Products. They use  
5 a water container or water that's allowing - using  
6 water to cool off body heat. There's some hybrid  
7 options. I - in my opinion, they're more effective  
8 using combination of phase change material and also  
9 evaporative cooling. For example, Polar Products, and  
10 what they do, basically, phase change material. They  
11 have a higher melting temperature, thus allowing or  
12 providing higher cooling efficiency. PCM-based of - a  
13 ice pack materials are more effective than water  
14 because they are higher melting temperature.

15 In -- in addition to that, there are more  
16 innovations out there. For an example -- which are  
17 hybrid, but in addition to the evaporative cooling and  
18 phase change material, they use batteries, and air  
19 cooling have increased the cooling efficiencies --  
20 efficiency to a higher level.

21 It's really important to take a hybrid and --  
22 and -- and whether an environmental condition-based or

1 work environment -- environmental condition-based  
2 approach where it is important to know where we are --  
3 the employees are working, and make the decision to  
4 choose the right kind of product.

5 And it's really important to have a hierarchy of  
6 product where we -- we can -- we can understand and  
7 evaluate product performance, and be aware of the  
8 product performance, and make -- and purchase or use  
9 the right kind of product that can be useful or more  
10 effective to cool off, maintain a body core temperature  
11 within the comfortable zone.

12 MR. GLUCKSMAN: So I think that, you know, with --  
13 with microprocessors as well, there's a lot of  
14 technology coming to this area. I don't know if we'll  
15 see Moore's Law where, you know, the improvement is  
16 doubled every two years. But also, just one other  
17 thing on this.

18 We've heard a lot about wet bulb globe temperature  
19 devices in the shooting sports industry, which has a  
20 lot of handheld devices for temperature, and wind  
21 speed, and so forth now, also, has devices that are  
22 kind of rugged that, you know, it - some do have the

1 black bulb, some don't. But they're able to assess,  
2 you know, a wet bulb globe temperature, you know,  
3 number. And so that's one area of - I'll call it  
4 technology that's coming into the space from, you know,  
5 other industries.

6 JUDGE BELL: Any other questions for this panel?

7 MS. CARLON: There are not, Your Honor.

8 JUDGE BELL: All right.

9 MR. GLUCKSMAN: Your Honor?

10 JUDGE BELL: Yes.

11 MR. GLUCKSMAN: I mentioned one thing in my  
12 comments, this hyperkewl thing. For -- for the  
13 transcriptionist, hyperkewl is -- the spelling is  
14 H-Y-P-E-R-K-E-W-L. But the record will be (AUDIO  
15 MALFUNCTION).

16 JUDGE BELL: Thank you, Mr. Glucksman.

17 THE COURT REPORTER: Actually, this is Christine.  
18 While you're at it, could you spell the name of the  
19 doctor -- the paper you cited?

20 MR. GLUCKSMAN: Yeah, yeah. Roxana Chicas. So I  
21 guess Roxana is R-O-X-A-N-A, and Chicas was  
22 C-H-I-C-A-S, PhD.

1 JUDGE BELL: All right.

2 Thanks all of you. Appreciate it.

3 MR. GLUCKSMAN: All right. Thank you very much.

4 JUDGE BELL: Okay. Bye-bye.

5 MS. CARLON: Your Honor, at this time, OSHA has  
6 requested a ten-minute recess if that -- if time  
7 permits for you?

8 JUDGE BELL: That's fine.

9 So it's -- my clock says 3 o'clock, so we'll be  
10 back at 3:10.

11 MS. CARLON: Great. And when we return, the next  
12 speaker group will be the American Road and  
13 Transportation Builders Association. So we'll return  
14 at 3:10.

15 (Break.)

16 MS. CARLON: All right. Now, we will continue  
17 with our public testimony. The expected speaking order  
18 is currently displayed on the screen. Just want to  
19 confirm that our OSHA panel is back in the room.  
20 Great. Okay. We have the American Road and  
21 Transportation Builders Association represented by Meg  
22 Rietschlin, Bradley Sant, and Prianka Sharma. Please



1 state your name and affiliation as you move throughout  
2 your testimony. Thank you.

3 MS. SHARMA: Good afternoon. Prianka Sharma with  
4 the American Road and Transportation Builders  
5 Association, joined by my colleague Brad Sant and our  
6 member, Meg Rietschlin of Rietschlin Construction. We  
7 represent 8,000 members in the transportation  
8 construction industry and appreciate the opportunity to  
9 provide additional feedback today.

10 Our association represents all sectors of the  
11 transportation construction industry and collectively  
12 supports thousands of men and women who build and  
13 maintain the nation's transportation infrastructure.  
14 We've engaged throughout this rulemaking process, and  
15 to avoid repeating the content of those submissions,  
16 we've consolidated today's remarks to focus on key  
17 additional concerns. With that, I'll first turn things  
18 over to Meg.

19 MS. RIETSCHLIN: Good afternoon. I'm Meg  
20 Rietschlin, president of Rietschlin Construction, a  
21 small contractor building smaller bridges, roads,  
22 concrete construction, and excavation in non-urban

1 areas of Ohio. I've been in business 39 years. I have  
2 participated in several comment opportunities on the  
3 heat standard, including serving on the SBREFA panel.  
4 I appreciate the opportunity to comment and hope that  
5 OSHA takes our comments into consideration when issuing  
6 a final rule.

7 Today, I would like to share a personal experience  
8 that relates to heat safety that I hope you will  
9 consider. This rule greatly affects highway and bridge  
10 contractors, especially smaller contractors. There was  
11 a highly experienced, safe, reliable equipment operator  
12 that worked for me for 18 years, from 1999 to 2017.

13 One day in 2013, while working on a bridge job,  
14 something seemed not right about him. The guys around  
15 him asked him if he was okay. He said he was fine. In  
16 minutes, his condition seemed to worsen. They got him  
17 into the cab of his machine and turned the air  
18 conditioner on high. Tried to get him to drink. No  
19 one knew what was going on, so they immediately called  
20 the emergency squad and his wife. Later, we found out  
21 that his doctor had changed his medications, and it had  
22 affected him.

1           After that, I asked him to list his medications on  
2           paper and emergency contact numbers and seal the  
3           envelope. My thought was that if this incident ever  
4           repeated, and his emergency contact would not be  
5           available, I could open the envelope and provide the  
6           info to the emergency responders. They would be more  
7           informed. I believe we did the right thing in this  
8           situation. I don't know what I don't know.

9           As an employer who takes safety very seriously, I  
10          provide training and PPE. On job sites, I provide  
11          water, cold drinks, ice, popsicles and even watermelon.  
12          But I cannot make someone drink. Though I can create  
13          and enforce policies, ultimately, I cannot control what  
14          employees do. Smoking tobacco, marijuana, drinking  
15          alcohol, using drugs, or taking medications, or  
16          monitoring any health conditions. Any of these can  
17          affect employees' ability to work in a warm  
18          environment. I can do all the right things, but it is  
19          a partnership of trust with the employees. I shouldn't  
20          have recordable incidents outside my control.

21          One type of work that we bid and build is small  
22          bridges in rural areas. When pouring the deck, there

1 are many requirements and specifications. Factors  
2 include the air temperature and wind speed, how many  
3 cubic yards will be placed and finished, and the  
4 weather. On a particular bridge pour, we may begin at  
5 8 p.m. The concrete supplier is expected to deliver  
6 product and provide deliveries of so many cubic yards  
7 per hour.

8 There are outside testing people, concrete pumps  
9 set up, and inspectors on site. Once the pour  
10 commences, we need to keep going. When the pour ends,  
11 there is finishing the concrete and placing burlap.  
12 Each of these tasks needs to happen immediately after  
13 the other without interruption, or we would risk cracks  
14 or other compromises to the structural integrity, and  
15 it would be costly to repair.

16 Unfortunately, as a small contractor, we don't  
17 have the luxury of a spare crew sitting on the sideline  
18 to jump in and take over so that a first group could  
19 take a mandated break. OSHA's rule, as proposed, would  
20 be impossible for us. It is simply not feasible to  
21 stop work to take breaks at mandated times. We do  
22 provide ice, water, and cold drinks, and our employees

1 take turns handing them out while others are working to  
2 keep the job moving.

3 If a small contractor bid federal jobs thinking  
4 that they were going to have to fund a spare crew, the  
5 cost would increase so much that we may reconsider.  
6 Federal and state bridge projects are low bid and  
7 competitive. A small company like mine would find it  
8 very hard to stay competitive.

9 Another issue is that the recordkeeping proposed  
10 by the standard will be very difficult for a small  
11 contractor. This will require a separate person to  
12 document climate, employees, and their physical  
13 responses. Again, a competitive disadvantage. Right  
14 now, recordkeeping is integrated into my team's job  
15 function. But this particular standard would push me  
16 to need another employee. I hope that you will  
17 consider the effect of these standards on a small  
18 contractor in the highway bridge space. Thank you very  
19 much.

20 MR. SANT: Thank you. I am Brad Sant with the  
21 American Road and Transportation Builders Association.  
22 I'd just like to share a few other thoughts on the heat

1 standard. Of course, we want to protect our workers  
2 and are very much supportive of supplying water and  
3 rest and shade and making sure that the workers have  
4 what they need to be safe on the job site.

5 But with that in mind, in keeping workers safe,  
6 what weighs heavily on me is the fact that somewhere in  
7 between 50 and 90 workers are killed every year on the  
8 job in this industry as they are struck, often by  
9 motorists who pass through the barricades for a lot of  
10 different reasons and strike the workers.

11 Everything that we do is colored by our concern  
12 for struck-by incidents, including weighing what  
13 happens when we are doing certain things as required in  
14 this rule and how that might impact the safety of  
15 workers in the struck-by incident rule. And so for  
16 example, when we look at heat standards for heavy and  
17 highway construction, we see that there have been four  
18 fatalities in twelve years based on BLS data. Those  
19 are tragic. But when I compare them to 60 deaths a  
20 year from struck-by incidents, I'm starting to compare,  
21 okay, how does the heat standard impact those other  
22 greater hazards?

1           And what we have found continually is the workers  
2           are subject to the frustration of motorists who may  
3           have been delayed in traffic because of the  
4           construction projects going on. Motorists frequently  
5           will drive behind the barricades. They'll drive right  
6           up to the barricades. They throw things at workers.  
7           They're angry because they have been delayed for  
8           something that was important for them to do. And when  
9           I consider that the impact of workers being seen  
10          sitting on the side of the road, taking a break, and  
11          the anger that sometimes puts toward them, it concerns  
12          me. And I wonder, what is the greater harm and what is  
13          the impact of the heat standard on this?

14          And so we have to look at all these things in a  
15          greater environment of where it's very dangerous. And  
16          for these same reasons, we have very much supported  
17          what other groups in the construction industry have  
18          said about the need for a separate regulation for  
19          construction. This is why we have a Directorate of  
20          Construction at OSHA, because we know it's very  
21          different. We can be working in indoor environments --  
22          or outdoor environments, and suddenly, we've enclosed

1           ourselves in an indoor environment in construction. My  
2           team can be working in tunnels and suddenly, they're  
3           outside of those tunnels.

4           The indoor-outdoor standards and disparities there  
5           don't make sense in construction. We're moving down  
6           the road. And so setting up sometimes in those  
7           environments where you're in moving operations, such as  
8           paving, the ability to have set break areas doesn't  
9           work. And so there's just a number of considerations  
10          that we think need to be taken in view of OSHA before  
11          moving forward with the standard that seemingly was  
12          designed without understanding fully the impacts of  
13          this industry.

14          MS. SHARMA: Prianka Sharma with ARTBA. Meg  
15          raised an important point here. You don't know what  
16          you don't know about your employees. And for us, the  
17          real concern is that the rule expects employers to  
18          identify and mitigate individual heat-related risks,  
19          such as underlying medical conditions, medications,  
20          recent travel, or lifestyle choices without a clear or  
21          lawful way to obtain that information. And at the same  
22          time, it holds the employers responsible for outcomes



1           that they may not be able to prevent.

2           As she alluded to, she can offer all of these  
3           things to her workers, but she can't force them to  
4           drink. This lack of clarity ultimately raises a due  
5           process concern. Employers are being asked to manage  
6           risks that they can't reasonably control, and they may  
7           face penalties despite good faith efforts to do so. So  
8           without some clear safe harbors or limits to liability,  
9           the rule opens the door to enforcement based on  
10          outcomes and not conduct.

11          And so in short, the rule structure and scope and  
12          assumptions may increase liability and strain resources  
13          and shift attention away from more immediate hazards.  
14          So we're asking you to please revisit these provisions  
15          with clear limitations that are industry tailoring and  
16          a more realistic understanding of the job site  
17          conditions that our industry faces. With that, we're  
18          happy to answer any questions.

19          JUDGE BELL: Questions from OSHA for this panel?

20          MR. LEVINSON: Andrew Levinson from OSHA. In  
21          your -- first of all, thank you all for your testimony  
22          today and your written comments. In your written

1        comments, you had asked OSHA to expand the definition  
2        of emergency response to include a broader range of  
3        industries and job titles, including construction  
4        workers doing emergency road and bridge repair,  
5        hazardous debris removal, erosion control, and other  
6        structural repairs.

7            And what I'm curious about is a question that we  
8        similarly raised with the Edison Electric Institute,  
9        which is during these times, it seems like there's an  
10       incentive for workers to work longer, faster, harder  
11       than they would otherwise in order to restore critical  
12       infrastructure or services. If there were such an  
13       emergency exemption for this sort of work, how would  
14       you ensure that workers are safe while doing this work  
15       from heat injury?

16           MR. SANT: Certainly, a great question. And  
17        certainly, in those situations, it's even more critical  
18        that workers have access to clean water, right?  
19        Because the infrastructure may be out. It may be  
20        important that they have access to abilities to take  
21        breaks when it's needed, because they're working a long  
22        time and they're trying to, you know -- the electrical

1 team can't get in there if the roads aren't open. So  
2 those things are important.

3 But where we do need exemptions are site-specific  
4 safety plans. You know, that doesn't work very well in  
5 an emergency situation. Considering, you know,  
6 considering a lot of the other aspects of the rule,  
7 certain training requirements that are there, those are  
8 the kind of things that just don't make sense when  
9 we're trying to get in there and get a job done.

10 I don't think, and I certainly welcome Meg's  
11 comments in the real situation of a contractor, but we  
12 certainly don't want to put workers in a dangerous  
13 situation where they don't have what they need, and  
14 they can even be more difficult to get it. We saw that  
15 in Katrina and down south, where infrastructure was out  
16 for months, and we had to bring in the water and the  
17 supplies to them. So that is always necessary no  
18 matter what the situation is. But other aspects of the  
19 rule just don't make sense in that situation. So  
20 that's what we're talking about. A little more need  
21 for flexibility and understanding how the industry  
22 works.

1           MR. LEVINSON: Thank you. The next question comes  
2           from Jonathan Berr here in the room.

3           MR. BEARR: Jonathan Berr, Directorate of  
4           Standards and Guidance. Thank you for coming to talk  
5           to us today. First thing, I was hoping if you all  
6           would be able to -- in your written comments, you  
7           referred to the Heat Injury and Illness Prevention Plan  
8           from a contractor in Wisconsin. I was hoping that you  
9           all would maybe be able to provide that to the record  
10          in your post-hearing in comments, as well as any  
11          information you might have on costs and benefits of  
12          that plan. You mentioned how that was a specific plan  
13          that was tailored to the industry, so we would very  
14          much like to see that.

15          MS. SHARMA: We can certainly ask them. If it's  
16          proprietary, obviously, we'll have to work with you to  
17          see if we can provide it to you under cover. But we  
18          can certainly ask them if they're willing to provide  
19          it.

20          MR. SANT: And we'd be happy to share with you a  
21          plan that we developed jointly with the National  
22          Asphalt Pavement Association several years ago that we

1 developed for our industry, a kind of a guideline, a  
2 Swiss cheese that they can take and use. So yeah, we  
3 are working these issues.

4 MR. BEARR: That'd be great.

5 MR. LEVINSON: Let me also offer, if that  
6 contractor in Wisconsin would like to redact their  
7 name, but otherwise submit the plan, that would be  
8 wonderful as well. We're interested in the content,  
9 not necessarily the contractor's name.

10 MR. SANT: Very good.

11 MR. BEARR: All right. Jonathan Bearn, OSHA,  
12 again. Can you elaborate on what some of the  
13 administrative challenges are for small businesses that  
14 you see in complying with the Heat Injury and Illness  
15 Prevention Plan provision in the proposed rule?

16 MR. SANT: Meg, do you want to take that, or do  
17 you want me to jump in there?

18 MS. RIETSCHLIN: You can go ahead, Brad.

19 MR. SANT: Sure. Well, some of the requirements  
20 within the heat -- the plan that is required, it  
21 requires that it be tailored to every -- to specific  
22 job sites. And when you have multiple job sites, they

1       may come up and go down, sometimes within days.  
2       Sometimes, they're months. Sometimes, they're years.  
3       And so you know, in some situations, that may work.  
4       But in others, it really doesn't. And you have  
5       contractors at multiple sites around the area.

6               So if you have a small business where you are  
7       operating maybe one or two crews, and to have to change  
8       that and have a site-specific plan and keep records --  
9       even though it says in the rule that you're not having  
10      to keep track of temperatures, if an inspector shows  
11      up, what other way do you have to demonstrate that you  
12      have been monitoring that and making sure that, you  
13      know -- if you're acting within the action temperatures  
14      and the -- what's the word I'm looking for? Well, the  
15      80 degrees -- the heat triggers, the heat index  
16      triggers.

17             And so you know, there's a lot of recordkeeping  
18      requirements, both written and unwritten, record of all  
19      the training that takes place and how it takes place.  
20      And you know, for companies with small crews and small  
21      businesses, it's a bit of a burden. And if they're  
22      taking care of this as part of their job safety

1 analysis and what they're doing every day in their  
2 toolbox talk, to have these written plans, we're just  
3 not quite sure are necessary.

4 MR. BEARR: Thank you. I want to switch gears and  
5 talk a little bit about acclimatization. And in the  
6 written comments, you said that your members have long  
7 implemented acclimatization protocols. Can you  
8 describe some of these protocols, how they're used?

9 MR. SANT: Sure. Well, depending on, you know,  
10 for whether it's new workers - so in hot environments,  
11 and just we were talking to members today about these  
12 very questions - schedules are sometimes changed.  
13 They'll begin work, instead of at 7 in the morning,  
14 they'll begin at 4 in the morning, right? So they can  
15 work in cooler environments, so they'll begin later at  
16 night. And so the shifts will change. And sometimes,  
17 they're going to reach certain temperature thresholds,  
18 some companies shut down their operations. So we are  
19 adjusting times and schedules to try to meet better -  
20 the cooler temperatures during the day. But for new  
21 workers that come on, there's often procedures for them  
22 to begin working, and they start at jobs that are not

1 so highly impactful and work their way up to those more  
2 labor-intensive jobs.

3 But again, it's really going to vary because if  
4 the workers come on in the springtime when we generally  
5 begin our work, that acclimatization happens naturally  
6 as we get into the summer months. When someone comes  
7 on, you know -- if there's a need to bring somebody on  
8 in the middle of the summer, of course that process is  
9 going to be different.

10 MR. BEARR: And in your written comments, you  
11 noted that the gradual acclimatization schedule was, in  
12 your opinion, impractical for the industry. Do you  
13 have any thoughts about the second option that was  
14 provided by OSHA that would require for employees in  
15 their first week for the minimum - the procedures  
16 required, the high heat trigger - to be actually  
17 triggered at the initial heat trigger level?

18 MR. SANT: Well, I think more of what our concern  
19 was -- there is just a lack of understanding. For  
20 example, what happens when you're working for a week at  
21 70, 80 degrees or 78 degrees, and then suddenly, it's  
22 80? Have they acclimatized because they are working at



1        78, 79 degrees, or suddenly does that acclimatization  
2        kick in when they're hitting 80 degrees? And what if  
3        they've been working away for 80 degrees, and then we  
4        get a cool spell, so the next week it's 75, and it goes  
5        back up to 80; are they still acclimatized, or we have  
6        to start that process over?

7                There are just so many questions in those  
8        acclimatization protocols that we didn't understand how  
9        that would happen practically in an outdoor environment  
10       that, you know, we just kind of said there needs --  
11       there seems to be a lack of understanding about how  
12       this acclimatization works when you're outdoors  
13       constantly and the temperatures are fluctuating back  
14       and forth.

15               MR. BEARR: Do you have any ideas of alternatives  
16       that could be used instead to address this?

17               MR. SANT: We certainly do. We certainly have  
18       talked about them, and I'd be happy to provide those  
19       with -- in our follow-up comments. It's probably a  
20       little bit lengthy to go into because it's not very  
21       straightforward. But you know, there's ways of having  
22       the people become acclimatized without having those

1 specific triggers. Because like I say, you can be  
2 working at 75 degrees for a week. Aren't you  
3 acclimatized when it then reaches 80? It just --

4 MR. BEARR: It'd be great --

5 MS. SHARMA: I think it's --

6 MR. BEARR: We'd very much like to see it in the  
7 post-hearing --

8 MS. SHARMA: Sorry. Go ahead.

9 MR. BEARR: Sorry. Go ahead.

10 MS. SHARMA: I was just going to say it's also  
11 variable because it's job-specific, site-specific,  
12 employee function-specific whether or not the employee  
13 can be rotated out to a different job. Are they  
14 trained to do different jobs, or are they highly  
15 specialized in one task? So as Brad's alluding to,  
16 we're happy to provide some written thoughts and  
17 feedback on that, but it's a very specialized and  
18 nuanced issue for us.

19 MR. BEARR: We'd be very interested in your  
20 thoughts about how that could be used in the framework  
21 of a rule. Thank you.

22 MR. LEVINSON: The next questions from OSHA come

1 from Patti Downs, who is joining us online.

2 MS. DOWNS: There we go. Hi. Patti Downs with  
3 the Directorate of Standards and Guidance. In your  
4 written comments, you state that members already  
5 provide shade. However, there are some circumstances  
6 where shade cannot be provided. Right? It's not  
7 feasible? For those situations where shade is  
8 provided, can you elaborate on its use, including  
9 things like how the shade is provided? How close it  
10 typically is to the work area? If it's portable, so it  
11 can relocate as work moves, those sorts of things?

12 MR. SANT: Sure. So again, this will depend on  
13 the job and the site. So like if we're doing a large  
14 bridge project, and it's a warm area, some contractors  
15 will bring in a trailer where they can take breaks,  
16 have lunch in a cool environment. Some places that are  
17 not -- that are more mobile, you'll, you know -- as  
18 ISEA mentioned earlier, you can put up a pop-up tent.  
19 Or sometimes, if there's power or a generator, you can  
20 put up some fans. In the best -- or the most difficult  
21 situations, hopefully, there is some trucks or, you  
22 know, some cabs equipped with air-conditioning where

1       you can kind of rotate the workers through. They can't  
2       be taking all the breaks at the same time. And that's,  
3       again, where part of the rule said, you know, there has  
4       to be enough space so that all the workers can use it.  
5       Well, you can't at the same time, but you can if you're  
6       rotating it. They're not there.

7               So you know, those are -- it just really depends  
8       on the job and what's happening. You know, and I was  
9       just thinking today, as I was driving in and crossing  
10      the 14th Street Bridge, where we've got a lane closed  
11      because they're doing bridge repairs, there's no place  
12      to put a tent there, right? Because it's just such a  
13      narrow place, and the bridge is about a half mile long.  
14      So you could put maybe a tent at either end of it, but  
15      it's going to require the workers to have to walk there  
16      to get to shade.

17             So you know, like I say, it's such a dynamic  
18      environment, it's hard to pick one answer to the  
19      question, but there are a lot of options that are out  
20      there that are available. And like I say, if it's a  
21      big job and they're going to be there a long time and  
22      there's space, yeah, let's get them something a little

1 more permanent and cooling, like a trailer.

2 MS. SHARMA: And a lot of these are built into the  
3 contract. The rights of way to put up structures are  
4 built into the contract when the contractors are  
5 bidding on it. So the state DOT is having to go out  
6 and measure and figure out the volume of traffic, the  
7 likelihood that the traffic might need to use the  
8 shoulder, and then build into the contract before they  
9 even bid on it what the right of way is going to look  
10 like for those structures.

11 MR. SANT: And again, part of the challenges with  
12 those structures in every situation, not all, but in  
13 some is that they then pose a hazard to motorists who  
14 may be pulling off onto the shoulder or --

15 MS. SHARMA: Or pedestrian, bicyclists --

16 MR. SANT: Or pedestrian. Because our sites are  
17 open to the public, and you -- you've all sat through  
18 them, and it's not an easy environment.

19 MS. DOWNS: Okay. Thank you. And then for those  
20 situations then where shade can't be used, can you  
21 please tell us about any alternatives you've seen used  
22 or the types of controls your members use in those

1 situations to prevent heat-related illness?

2 MR. SANT: Sure. And that is just making sure  
3 there is some kind of a cool liquid. As Meg said,  
4 there's, you know -- you could provide them popsicles,  
5 ways to cool off. There is the PPE that, you know, you  
6 can dip in the water and then put it on, and it helps  
7 cool you down. There --

8 MS. SHARMA: Wide-brimmed hats --

9 MR. SANT: Yes.

10 MS. SHARMA: -- is one of the ones our members  
11 told us about.

12 MR. SANT: Yeah. Yeah. That's the best you can  
13 do if you don't have the shade. So anyway, those are  
14 options. Right? That's how we're doing it now. I'm  
15 not sure that would meet OSHA's standard as proposed,  
16 but we'd love it to be able to work in that situation.

17 MS. DOWNS: And then one last question from me  
18 about monitoring for heat exposures. How do your  
19 members determine when to start using all of these  
20 protective measures?

21 MR. SANT: And again, I welcome - if Meg wants to  
22 jump in here. But you know, I - you know, jugs of

1 water, whether it's water bottles or coolers with water  
2 or you know, the big old five gallon water bucket,  
3 those are generally out on the job site, even when it's  
4 60 degrees. I mean, people need to drink, right? And  
5 so those aren't necessarily triggered by any  
6 temperature; that's just out there because you're out  
7 there, and you're not near a water fountain. And so  
8 you've got - you have those types of things that are -  
9 that are available.

10 You know, breaks, those will sometimes happen  
11 naturally. Sometimes, the load is late getting  
12 delivered, so everybody is waiting for that load, that  
13 concrete or that asphalt to get there. Or as Meg said,  
14 sometimes, when you're in a -- something where you  
15 can't take a break, you know, you can't have a cold  
16 seam in asphalt or concrete, or you're going to have an  
17 infrastructure failure. And so then you rotate the  
18 workers through and allow them to take the breaks. But  
19 you know, again, this is why we have kind of advocated  
20 for a construction standard just to kind of deal with  
21 these varying dynamics in the industry.

22 MS. SHARMA: Meg, did you have something to add?

1 MS. RIETSCHLIN: I was just going to say that all  
2 summer long, we do the same things. We don't wait for  
3 a day to get hotter. We have water. We have ice. We  
4 use the cooling neck wraps. We use the hard hat  
5 shades. We have portable tents. We have fans. We do  
6 them all the time throughout the whole summer.

7 MS. DOWNS: Okay. Great. Thank you. That's all  
8 from me.

9 MR. LEVINSON: The last questions come from Zoe  
10 Petropoulos, who's joining us online.

11 MS. PETROPOULOS: Hi. Zoe Petropoulos,  
12 Directorate of Standards and Guidance. In your  
13 comments and testimony, you express concerns with the  
14 scheduled rest breaks every two hours, and one reason  
15 you mentioned in your comment was the need to execute  
16 time-sensitive operations. You recommend in your  
17 comments that breaks should instead be flexible and  
18 provided as needed. And I might have heard you briefly  
19 answer this, but hoping for confirmation or more  
20 insight; can you discuss current practices at member  
21 employers' work sites on breaks? Are employees  
22 typically able to take breaks as needed to prevent



1           overheating at the moment? And if so, how do  
2           supervisors and crews arrange for those as needed rest  
3           breaks during time-sensitive operations?

4           MS. SHARMA: Meg, do you want to answer?

5           MS. RIETSCHLIN: Yes. So in our case, people take  
6           breaks as needed. And if we can rotate individuals, we  
7           do. We work closely together with each other, so  
8           there's always multiple people looking out for each  
9           other. And if someone had to walk away and take a  
10          break, it's not a problem. They just go. As far as  
11          any sort of supervision for breaks, there isn't. We  
12          rely on each other to take care of them. And when  
13          they're taking a break, they're not walking far away  
14          from the project or something. They're just going off  
15          to the side, getting some water, getting whatever they  
16          need, getting some shade, and then come back. And  
17          also, we tend to pace things in the hotter weather  
18          slower than we would the rest of the season.

19          MS. PETROPOULOS: Thank you so much. That was it  
20          for me.

21          MR. LEVINSON: Thank you. I have one final  
22          question. OSHA has gotten a lot of comments from

1 people about doing a performance-oriented approach  
2 instead of a specification-oriented approach. And one  
3 of the challenges that we have is not necessarily with  
4 the high road responsible employers; it's with the low  
5 road folks that are, you know, not taking the  
6 responsibility to worker safety seriously. How could  
7 OSHA write a regulation that gives you the flexibility  
8 that you're asking for while still assuring some  
9 minimum protections for workers to make sure that  
10 they're adequately protected?

11 MR. SANT: Well, I think initially, you had -- you  
12 know, some of the -- you know, I think of the OSHA  
13 posters that say, "Water. Rest. Shade." Right?  
14 Those should be provided, and they should be required.  
15 Now, to say that you have to give that rest at a  
16 certain interval, that's difficult for us. Or to say  
17 that what, you know -- what we're always concerned  
18 about is there's a rule out there that's a gotcha, as  
19 opposed to, you know, the water was 70 degrees, not 60  
20 degrees, so it wasn't suitably cool. You know, those  
21 are the kind of things that concern us, but we are not  
22 at all concerned with saying, you need to make sure the

1 workers are hydrated properly. You need to make sure  
2 that if workers are feeling stressed, they can go take  
3 a break. You need to make sure that if you don't have  
4 a place where they can go get shade, they can go sit in  
5 the cab of the truck if they get -- and sit in the air-  
6 conditioning to get cooled down.

7 So instead of just saying it has to be done a  
8 certain way, saying it has to be done -- it's kind of  
9 just like we do with a lot of the PPE standards. We  
10 don't always just say you have to use it a certain way,  
11 because you have to use it to be protective. And so  
12 that's kind of what we have in mind. I don't think  
13 it's -- anybody's opposing OSHA asking us to make sure  
14 that the workers are cool, safe, hydrated, you know,  
15 healthy on the job site. But what we have worries  
16 about is when it said it has to be done in a certain  
17 way, and it has to be accomplished in a certain way.

18 MR. LEVINSON: Thank you. Your Honor, that  
19 concludes the questions from OSHA.

20 JUDGE BELL: Any questions from the Solicitor?

21 MS. WILES: Thank you, Your Honor. Linda Wiles  
22 from the Solicitor's Office. I have no questions.

1 Thank you so much for being here today and for your  
2 testimony.

3 JUDGE BELL: Are there any other questions for  
4 this panel?

5 MS. CARLON: Yes, Your Honor, we have three. The  
6 first is from Mr. Lundegren. Please state your name  
7 for the record.

8 MR. LUNDEGREN: Good afternoon, everybody. And hi  
9 to Prianka and Brad and to Meg, who was one of our  
10 small entity representatives on the SBREFA panel. This  
11 is Bruce Lundegren from the Office of Advocacy at the  
12 U.S. Small Business Administration. And I met this  
13 morning with one of your fellow construction trade  
14 associations, and I was talking about this hearing.  
15 And one of the participants at the meeting complained  
16 that they said that they think that OSHA views the  
17 workplaces as an outdoor work site with an employee  
18 doing the same task all day or an indoor workplace with  
19 an employee working on the same piece of equipment all  
20 day. And that's not the way that workplaces are.  
21 Particularly, in your industry where you are, you know,  
22 completely mobile and everything's changing.

1           And I think, you know, we've talked about  
2           workplaces of infinite design and variation. So  
3           there's nothing in OSHA's rule as written that deals  
4           particularly with impractical or infeasible or creating  
5           a greater hazard. And I wonder -- I know, particularly  
6           in your industry, there's concerns about setting up  
7           artificial shade and tents and things like that. Can  
8           you please speak a little bit more to that?

9           And Meg, you could start or anyone.

10          MS. RIETSCHLIN: Let Brad start. I have to -- it  
11          was a long question. I need to process.

12          MR. LUNDEGREN: Sorry.

13          MS. SHARMA: In terms of feasibility, we touched  
14          on this a little in our written comments, and we didn't  
15          have time to touch on it in our testimony today. But  
16          one thing that we did -- that Meg did touch on is the  
17          fact that this is a continuous operation that can't be  
18          stopped. And so we're either rotating the workers out,  
19          or they're timing the project so that they can go from  
20          start to finish and have it be a seamless process.  
21          Because if -- as Meg alluded to, if they stopped while  
22          pouring concrete and trying to get the bridge, there

1        would be cracks -- essentially, there would be cracks  
2        in the bridge. And so there would be structural  
3        defects in the project, and they would end up either  
4        having to go back and redo it, or potentially down the  
5        line, there would be liabilities to the contractor if  
6        the structural defects were not immediately apparent.  
7        So in terms of feasibility, we just -- we can't have  
8        workers stopping what they're doing when the clock  
9        strikes two hours to take a break because of the nature  
10       of the project that they're working on.

11           Brad.

12           MR. SANT: Yeah. Well, another thing I just want  
13        to mention -- and this kind of deals with sometimes the  
14        ability to provide tents and shade on the side of the  
15        road -- we're also governed by the Federal Highway  
16        Administration and a document called the Manual on  
17        Uniform Traffic Control Devices that governs very  
18        specifically what you can put on the side of the  
19        roadway, because it's not just the workers who are  
20        impacted, it's the motoring public, it's bicyclists,  
21        pedestrians. And so sometimes, if you're putting up  
22        something that can be struck and go through the

1 windshield of a car, or you know, impale a cyclist or  
2 someone on a motorcycle, those things are illegal. And  
3 so those things also impact our ability to provide  
4 shade in all situations. Right? Because there's other  
5 regulations and other people outside of the workers in  
6 the construction company who are impacted by the safety  
7 of what we do.

8 MS. RIETSCHLIN: And sometimes, there's a limited  
9 right of way, which narrows the space in which you can  
10 put equipment, your steel, your rebar, whatever it  
11 might be. Sometimes, you are very constrained by that  
12 area. And I think you have to remember, too, on a  
13 bridge project, it's a series of different aspects of  
14 work. You start with removals, you have excavation,  
15 and there's piping. So it's not just one thing that  
16 you do every day. There's multiple phases to a  
17 project. And so the site of the work changes and the  
18 scope of what people do changes.

19 MR. LUNDEGREN: Okay. That's great. And we had  
20 earlier today the American Short Line -- this is Bruce  
21 Lundgren from SBA Office of Advocacy -- we had the  
22 Short Line Railroad Association testified at this

1       hearing, and they mentioned that they're regulated by  
2       the Federal Railroad Administration. And in this case  
3       of dual or competing jurisdiction, that OSHA should  
4       defer to DOT. Would you recommend something similar  
5       for your uniform traffic guidelines?

6           MR. SANT: Yeah. And to some effect, they do.  
7       Subpart G of the OSHA standards has adopted an earlier  
8       version of that MUTCD. And I, you know -- there's  
9       fairly good understanding between Federal Highway and  
10      OSHA where their jurisdiction ends because Federal  
11      Highway does not really enforce safety standards for  
12      workers, so OSHA steps in there. But there is this  
13      interaction because they do regulate for the motoring  
14      public. And so we have to make sure that what we're  
15      doing safe, say, to protect workers is not negatively  
16      impacting the motoring public.

17           MR. LUNDEGREN: Okay. Thank you. And one last  
18      question. Meg, I think you mentioned confounding  
19      factors in that an employee coming to work on  
20      prescription medication and the employer not knowing.  
21      And I asked this question yesterday of the Steelworkers  
22      Union, and nobody's really raised this issue during



1 the - during this hearing. But in the training  
2 provisions of the proposed rule on - it's item H, Roman  
3 numeral (xi). And it says you have to train on all  
4 policies and procedures that are applicable to the  
5 employees' duties as indicated in the works - work  
6 site's HIIPP.

7 And I'm wondering what is the responsibility of  
8 employees to, I guess, to hydrate, to take breaks when  
9 needed, or to report on when there are confounding  
10 factors, such as health concerns or medication, or  
11 they've been engaged in some kind of outside activities  
12 that might make them vulnerable? Because I know there  
13 are federal laws that prohibit inquiring about medical  
14 and physical conditions under the EEOC and HIPAA and  
15 ADA. So I'm wondering if you have anything to add to  
16 that. And what -- you know, what the employees might  
17 be expected to do.

18 MS. RIETSCHLIN: I can't ask those questions. I  
19 can't ask them if they have health conditions. I can  
20 have a drug-free workplace program, but if they're not  
21 caught in the net, which is drug testing, I'm not going  
22 to know anything about that. It's a difficult thing.

1 I think large employers can know more about the health  
2 of a person, but a small employer -- I mean, I provide  
3 health insurance, but their application is done online  
4 through the insurer, and I don't see anything. I would  
5 have to depend on them to come to me and say, hey, I  
6 can't do this job. And that would be the only thing I  
7 can count on. I can observe and think that, you know,  
8 something might be wrong, as we did in the field, but I  
9 really don't know that I have the ability to find out  
10 any more about them than just asking them if they're  
11 available and ready to work.

12 MS. SHARMA: Yeah. It was a real --

13 MR. LUNDEGREN: Okay. Thank you.

14 MS. SHARMA: -- challenge for some of our members  
15 in states where there's legalization of marijuana,  
16 because the employees could go and use the recreational  
17 drug on the weekend, test negative on a Monday or  
18 Tuesday, but still have it impacting their system. And  
19 we -- there have been members who've talked about  
20 concerns with having employees working while it's still  
21 in their system, even if they're testing negative, and  
22 that -- the impact that would have on their bodies and

1       their abilities to absorb heat and various other tasks  
2       that they would need to perform. But again, they're  
3       not necessarily allowed to ask their employees, what  
4       did you do this weekend?

5           MS. RIETSCHLIN: I don't know if this is the right  
6       place, but you know, our contracts have completion  
7       times, and they're determined by the owner. And so if  
8       you had two or three weeks of heat, and you had a  
9       number of people who were acclimatizing, would you  
10      still be able to finish your project on time, or would  
11      you be faced with, you know, liquidated damages and  
12      things like that? I don't know.

13          JUDGE BELL: Okay. What's our next question,  
14      please?

15          MR. LUNDEGREN: That's all I had, Your Honor.  
16      Thank you, Brad and Prianka. And thank you and nice to  
17      see you, Meg.

18          MS. RIETSCHLIN: Thank you.

19          MS. CARLON: The next question is from Mr. Barab.  
20      Please state your name for the record.

21          MR. BARAB: Yeah. Thank you. My name is Jordan  
22      Barab. Yeah, I had a couple of questions, mostly

1 clarifications. Also, nice to see you again, Brad.  
2 Haven't seen you for a while.

3 MR. SANT: For many years.

4 MR. BARAB: Yeah, yeah, yeah. Okay. So one of  
5 them is, I got the impression -- and I can't remember  
6 who said it, maybe Ms. Rietschlin -- that the mandatory  
7 break times in the standard under high heat conditions  
8 would require employers to either stop jobs or hire an  
9 additional crew. Is that correct?

10 MS. RIETSCHLIN: If I was doing a bridge pour, and  
11 I had a mandated break, I would have to have a separate  
12 crew ready to jump in. A bridge pour --

13 MR. BARAB: Okay. But the OSHA -- go ahead.

14 MS. RIETSCHLIN: Go on.

15 MR. BARAB: The OSHA standard only -- I mean, it  
16 doesn't say that everybody has to take a break at the  
17 same time, though. It just says that every employee  
18 has to take a break every -- a 15-minute break every  
19 two hours. So if you had, for example -- you know,  
20 just for example, eight workers on a job. There are  
21 eight different fifteen-minute periods in two hours, so  
22 only one worker would have to take a break at a time.

1           So that would -- it seems like you could -- would that  
2           be possible to fill in for that, in that case?

3           MS. RIETSCHLIN: If we had started a bridge pour,  
4           we would have to have an extra person to jump in to  
5           rotate through that.

6           MR. BARAB: Right. Okay. So an extra person, but  
7           not necessarily an extra crew in that case. Is that  
8           correct?

9           MS. RIETSCHLIN: I guess that could be accurate.

10          MR. BARAB: Okay. And the second thing I was  
11          hearing -- I got the impression that it's your  
12          impression that if an employee died on the job or got  
13          sick on the job for heat-related reasons, and it turned  
14          out it was because of some drugs they take -- they took  
15          that, you know, they weren't informed about. But you  
16          were otherwise -- you were in compliance with every  
17          element of the standard. But again, the employee died  
18          anyway because he was on these drugs. Is it under your  
19          impression that if you were complying with every other  
20          part of this -- every part of the standard that you  
21          would still get cited?

22          MS. RIETSCHLIN: I would have no idea to be able

1 to predict that.

2 MR. BARAB: Yeah. Because, I mean, the impression  
3 I got was that even if you're in compliance but  
4 something totally out of your control happens -- again,  
5 even though you're in total compliance -- you'd get  
6 cited by OSHA. And generally, that is not OSHA's  
7 policy to cite employers who are in complete compliance  
8 if, you know, something happens that was beyond their  
9 control and beyond the provisions of the standard. So  
10 I certainly understand your concerns there.

11 Obviously, everybody has concerns, which is why  
12 OSHA also requires training in those areas. But there  
13 are -- you know, there are situations, certainly, where  
14 there's been a fatality or injuries that OSHA, you  
15 know, finds the employer nevertheless in full  
16 compliance and therefore does not cite the employer.  
17 That's all I had have. Thank you.

18 JUDGE BELL: Okay. What's our next question,  
19 please?

20 MS. CARLON: Our next one is from Mr. Parsons.  
21 Please state your name for the record.

22 MR. PARSONS: Hello. Travis Parsons from the

1 Laborers' Health and Safety Fund of North America.

2 Hey, Brad. How are you doing?

3 MR. SANT: Hello, Travis.

4 MR. PARSONS: Yeah. Thank you for your very  
5 thoughtful testimony. You actually answered my major  
6 questions whenever you were answering some questions  
7 for Mrs. Downs from - from OSHA. But I just wanted to  
8 kind of add on to those questions you answered. Well,  
9 about how you provided shade out there on your jobs,  
10 you know, large and small. And obviously, you guys  
11 don't have a problem providing water. That came clear.  
12 But I guess the follow-up question, more than anything,  
13 is what about when those jobs get very large, like a  
14 very big job? How do you provide water, rest and shade  
15 on those big jobs, and especially with a mobile  
16 operation?

17 MR. SANT: Yeah. So I'm trying to think of a  
18 great big job that's a mobile operation. And so you  
19 know, like paving an interstate. And so those don't  
20 typically move as quickly. And so you might -- and  
21 again, depending on the right of way, it's -- there's  
22 so -- as you know, Travis, there's so many variables

1       there. But typically, it's pretty easy to get water to  
2       crews. I mean, you can put it in the pickup trucks.  
3       You can put it -- and make it available. You know,  
4       even -- I've had some members tell me that if they're  
5       working very remotely, they'll give them CamelBaks and  
6       let them work those CamelBaks to make sure they have  
7       their water. But if it's a big project where there's a  
8       lot of employees, often there will be a trailer set up  
9       or at least a hydrating station where they can, you  
10      know, get access to it because it just makes more  
11      sense, given the scale of the job.

12           MS. SHARMA: We had one member who custom builds  
13      hydration stations depending on the scale of the job.  
14      So either -- if it's smaller, they'll do individual  
15      water bottles. If it's bigger, they'll do big jugs,  
16      and they'll have like a, you know -- they'll build like  
17      a decanter thing or something where they can come and  
18      fill up water bottles and be able to do it that way.  
19      So depending on the scale, there are things that they  
20      can do.

21           MR. PARSONS: All right. Thank you very much.  
22      That's all I have.



1 JUDGE BELL: Any other questions for this panel?

2 MS. CARLON: There are not, Your Honor.

3 JUDGE BELL: All right. Thank you all very much.  
4 Appreciate it.

5 MS. SHARMA: Thank you.

6 MS. CARLON: The next speaker is Khris Hamlin.  
7 Please state your name and affiliation for the record.

8 MR. HAMLIN: Khris Hamlin with the Retail Industry  
9 Leaders Association.

10 JUDGE BELL: All right. Sir, go ahead, please.

11 MR. HAMLIN: Thank you very much, Your Honor, and  
12 to the OSHA representatives for the opportunity to  
13 testify today. Like previously stated, my name is  
14 Khris Hamlin, and I'm the Vice President of Asset  
15 Protection with the Retail Industry Leaders  
16 Association, also known as RILA. I'm here today on  
17 behalf of the retail members of RILA and the Employers  
18 Heat Illness Prevention Coalition to discuss the OSHA  
19 proposed rule on heat injury and illness prevention in  
20 outdoor and work settings.

21 But to give you some history on RILA first. The  
22 Retail Industry Leaders Association, commonly known as

1 RILA, is a U.S. trade association for leading  
2 retailers. RILA convenes decision makers, advocates  
3 for the industry, and promotes operational excellence  
4 and innovation. Our aim is to elevate a dynamic  
5 industry by transforming the environment in which  
6 retailers operate. RILA's members include more than  
7 200 retailers, product manufacturers, and service  
8 suppliers, which together account for more than \$2.7  
9 trillion in annual sales and millions of American jobs  
10 and hundreds of thousands of stores, manufacturing  
11 facilities, and distribution centers domestically and  
12 abroad.

13 RILA member companies take safety of their  
14 employees very seriously. We know that without a  
15 strong and secure, healthy workforce, retail operations  
16 will suffer. For this reason, U.S. employers  
17 collectively spend an estimated \$58 billion each year  
18 on employee safety, with retailers accounting for  
19 approximately 26 percent of all U.S. businesses, that  
20 translates to billions invested annually by the retail  
21 sector alone to protect their workforce. At the end of  
22 the day, we all share the same goals: safe, secure

1 workplaces for America's workers. Our comments support  
2 OSHA's goals of addressing workers' heat exposure and  
3 safety risks, while also providing needed  
4 recommendations to strengthen the potential final rule.

5 There are four key points that I just want to go  
6 through today. The first one is we need a flexible  
7 performance-based standard. As large retailers, we're  
8 advocating for a flexible performance-based heat  
9 standard to accommodate the variety of workplace  
10 conditions and retailers' already existing and  
11 effective heat illness prevention programs. Leading  
12 retailers operate the most mature and effective heat  
13 prevention programs, so a one-size-fit-all regulation  
14 will not create - or will actually create unnecessary  
15 compliance burdens without improving safety outcomes.

16 The second point is that if the rule is kept, the  
17 standard needs -- the standard needs for heat, or for  
18 higher heat triggers and simpler monitoring and  
19 recordkeeping requirements. We encourage OSHA to adopt  
20 the approach taken by Nevada and not include any  
21 specific heat triggers. Rather for OSHA should allow  
22 employers to make decisions about when to implement

1 mitigation measures based on assessment tools, such as  
2 an employer's job hazard analysis.

3 However, if they are kept, we do recommend that  
4 the heat triggers are -- as well as simpler monitoring  
5 and recordkeeping requirements are in place. The  
6 current proposed triggers are too low and do not  
7 account for the adaptability of the workforce to  
8 increasing temperatures. The proposed monitoring and  
9 recordkeeping requirements are overly complicated and  
10 burdensome. Instead of advancing worker safety, these  
11 requirements will require companies to divert resources  
12 away from proven heat illness mitigation programs and  
13 procedures to protect employees.

14 My third point is the exclusion of the indoor  
15 environments. We urge OSHA to exclude indoor  
16 environments from the current rule due to the unique  
17 challenges. Indoor heat regulations require different  
18 controls and presents disparate challenges compared to  
19 outdoor heat. If not excluded completely, we strongly  
20 recommend that a final rule enhance and support, rather  
21 than hinder existing efforts to mitigate heat for  
22 indoor settings.

1           Leading retailers have and continue to adopt  
2           innovative strategies, including ventilation systems,  
3           high flow fans, to ensure that their work - their  
4           warehouses and their indoor work settings can mitigate  
5           unsafe heat. Moreover, retailers have sophisticated  
6           heat monitoring systems and other protocols, including  
7           rest breaks and hydration requirements to maintain  
8           sites - safe and healthy workplaces. We recognize that  
9           no two programs are the same, and though smaller  
10          retailers may not have the same level of resources to  
11          implement certain measures.

12          And my fourth is on the feasibility of mandatory  
13          rest breaks and acclimatization protocols. We raise  
14          concern about the feasibility and the mandatory rigid  
15          rest breaks and acclimatization protocols. These  
16          measures may exceed what is reasonably necessary or  
17          appropriate under the Occupational Safety and Health  
18          Act.

19          In conclusion, RILA and the coalition urges OSHA  
20          to consider our recommended changes to the proposed  
21          rule. We believe that a flexible program, performance-  
22          based approach will enhance worker safety while

1 minimizing unnecessary burdens on employers.  
2 Ultimately, our goals are aligned. We want to promote  
3 healthy workplaces and ensuring the safety of our  
4 employees, and we believe our recommended changes will  
5 enhance the proposed rule by striking a balance between  
6 all stakeholders. Thank you for the opportunity to  
7 testify.

8 MR. LEVINSON: Your Honor, are you there?

9 JUDGE BELL: I'm here.

10 MR. LEVINSON: Can I proceed with OSHA's question?

11 JUDGE BELL: Go ahead.

12 MR. LEVINSON: Thank you, Mr. Hamlin, for your  
13 testimony. So OSHA's heard about, from a number of  
14 folks, a desire for a performance-oriented approach.  
15 We've heard a number of people mention the Nevada  
16 approach -- the Nevada OSHA approach. My question is,  
17 how does OSHA -- how should OSHA write a reg that  
18 provides employers with the flexibility that you're  
19 asking for while also assuring some minimum level of  
20 safety for workers? And in particular, for example,  
21 you mentioned a job hazard analysis. How do we make  
22 sure that employers don't just pencil whip a job hazard

1 analysis and just say, no problems here?

2 MR. HAMLIN: Very good question. Beeta, do you  
3 want to jump in there?

4 MS. LASHKARI: Absolutely. Thank you very much,  
5 Mr. Levinson, for your question. My name is Beeta  
6 Lashkari, and I'm on - just fielding questions on  
7 behalf of the coalition. Thank you again, Mr.  
8 Levinson. I think the Nevada heat rule provides a  
9 really good model for that. So there are sort of  
10 foundational elements in the standard that would sort  
11 of push. Right? Those - certainly our employers are -  
12 they go above and beyond, and they strive for  
13 excellence. But we do recognize that there are those  
14 bad apples. And so I think that having those  
15 foundational elements of water, rest, shade, training,  
16 certainly emergency response procedures, those are all  
17 in the Nevada OSHA rule. So we think it provides a  
18 really good example for that.

19 As for the JHA, certainly, we would not encourage  
20 sort of that pencil whipping, but I do think that  
21 compliance officers can tell the difference, right? I  
22 mean, that's sort of their role. And it would have to

1 be a meaningful JHA to be effective, and we are  
2 certainly advocating for effective programs. We  
3 believe we already have those effective programs, but  
4 they are built around sort of that performance-oriented  
5 nature and flexibility, even within our employer -- in  
6 our coalition, no two programs look the same. So  
7 that's why we're advocating for this approach.

8 MR. LEVINSON: Thank you. In your testimony, Mr.  
9 Hamlin, you also mentioned sophisticated monitoring  
10 systems. So what sorts of things are you monitoring in  
11 retail settings, and how do people make decisions? Are  
12 there trigger points? What -- how do you use that  
13 information to determine what's enough to protect  
14 workers in these sorts of retail settings?

15 MR. HAMLIN: Yeah. At a high level -- I'll just  
16 say that there are a lot of -- between AI and different  
17 technology, our members are using those to be able to  
18 identify concerns within their facilities, whether it's  
19 a warehouse facility or within their store settings.  
20 Beeta, I'll let you jump in there, too. And there are  
21 other specifics I'd like to be able to bring back to  
22 our members, and we can bring that back in the post-



1       hearing comments as well too. But Beeta, I'll let you  
2       jump in.

3               MS. LASHKARI: Absolutely. Thank you, Khريس.  
4       This is Beeta Lashkari. So certainly, thank you very  
5       much for the question, Mr. Levinson. The - some of  
6       the -just as Khريس mentioned, some of our employers are  
7       using very advanced technologies like AI. But we do  
8       want to recognize we do have small employers in our  
9       coalition, and they don't have the resources for that.  
10      But - so that's, again, I think why we're advocating  
11      for a performance-based, flexible approach, because it  
12      has to be workable for all sizes of employers, all  
13      industries that are represented that are covered by the  
14      standard.

15             One example that I heard from an employer, in  
16      terms of monitoring at least, is that they have set up  
17      sort of these monitoring hubs within their -- in larger  
18      spaces. I think warehouses can be particularly  
19      difficult in terms of, you know, getting them cooled  
20      down. And I'm not sure it -- that certainly, you  
21      know -- that would seem to be in compliance with the  
22      standard, but there is some preamble language that

1        might suggest otherwise if we're using sort of a hub or  
2        you know, maybe it's an average temperature instead of  
3        using the hottest part of the facility. If there  
4        are -- and that might be the reason we might not use  
5        that is because it's only transient that -- you know,  
6        only transient workers go to that part of the facility.

7                So this -- the hubs are really supposed to be  
8        where the most representative temperature is taken. So  
9        that was one thing that I thought was -- that was  
10       impressive. But again, we do have a wide range of  
11       employers in our coalition, and not everyone will have  
12       those types of resources.

13               MR. LEVINSON: And many folks have talked about  
14       water breaks as needed, rest breaks as needed. How  
15       should OSHA address the issue in a performance-oriented  
16       standard of when people have enough water and rest  
17       breaks? And we've heard some employers express concern  
18       about them becoming abused by workers. So how do we  
19       strike that tension and do something that's  
20       performance-oriented that, again, addresses both sides  
21       of the issue?

22               MS. LASHKARI: Sure. Thank you very much, Mr.

1       Levenson. This is Beeta Lashkari. I think the way to  
2       do that is really through guidance. Certainly, for --  
3       and we wrote public comments, and in terms of employee  
4       abuse, for the most part, we'd say our employers have  
5       good relationships with their employees, and there's an  
6       honor system and a trust there. And and that's not the  
7       case, but there are going to be sort of those outliers.  
8       And we want to see -- we would advocate for -- we'd be  
9       supportive of guidance, just nonmandatory guidance  
10      about where those sort of -- those guidelines --  
11      those -- maybe those borderlines sort of appear.

12           And again, it wouldn't -- we wouldn't be -- it  
13      would be sort of this -- we just want to make sure that  
14      we're not being cited for something where there's  
15      employee abuse. So that's really the concern there.  
16      And the same goes for the opposite end. One is, you  
17      know, when have we provided enough water? Certainly,  
18      the one quart per hour per employee requirement felt  
19      very prescriptive. And I'm not sure how employers can  
20      really monitor for that. If it gets to just below  
21      levels, is that going to be enough for a compliance  
22      officer to cite?

1           And again, it kind of goes back to that gotcha  
2           type of citation. We don't want that to be the case if  
3           our programs are effective, whether the amount of water  
4           is just slightly below what -- the one-quart threshold.  
5           Again, that's the reason for wanting a performance-  
6           based flexible standard. And again, I think we'd be  
7           very, you know, supportive of non-mandatory guidance.  
8           I know a lot of OSHA standards include appendices, non-  
9           mandatory appendices; those types of things, I think  
10          we'd be in support of.

11           MR. LEVINSON: Thank you. And our last question  
12          comes from Rachel Carse, who's joining us online.

13           MS. CARSE: Hi. I had a question specific to the  
14          retail industry. In determining the number of  
15          employees that work indoor and outdoor and with radiant  
16          heat, we've relied on estimates of the floor space  
17          cooled. So if in a building, 50 percent of the floor  
18          space was cooled, we used that number in our model. I  
19          was curious, especially in retail, if you have any  
20          information about if the workforce is concentrated in  
21          areas where the floor space is cooled, which means our  
22          estimate would be an overestimate. Or if you do have a

1 lot of workers that are working in non-cooled floor  
2 space, if that makes sense.

3 MS. LASHKARI: Thank you very much for your  
4 question, Ms. Carse. I think we would like to address  
5 that -- we'd like to consider that for post-hearing  
6 comments.

7 MS. CARSE: Okay. Thank you.

8 MR. LEVINSON: Thank you, Your Honor. That  
9 concludes OSHA's questions.

10 JUDGE BELL: Thank you. Anything from the  
11 Solicitor?

12 MS. WILES: Thank you, Your Honor. Linda Wiles  
13 from the Solicitor's Office. I don't have any  
14 additional questions.

15 JUDGE BELL: Okay. Do we have any other questions  
16 for this panel?

17 MS. CARLON: There are none, Your Honor.

18 JUDGE BELL: All right. Thank you all so very  
19 much for your testimony. We really appreciate it.

20 MR. HAMLIN: Thank you.

21 MS. LASHKARI: Thank you, Your Honor.

22 MS. CARLON: Next speaker group is the Kitchen

1 Cabinet Manufacturers Association, represented by Betsy  
2 Natz and Manesh Rath. Please state your name and  
3 affiliation for the record.

4 JUDGE BELL: Mr. Rath?

5 MR. RATH: Yes. I'll start if you can hear me,  
6 Judge Bell.

7 JUDGE BELL: Yeah. Just state your name and  
8 affiliation, please.

9 MR. RATH: Thank you. I am Manesh Rath with the  
10 law firm Keller and Heckman LLP here in Washington,  
11 D.C., on behalf of the Kitchen Cabinet Manufacturers  
12 Association.

13 JUDGE BELL: Please go ahead.

14 MR. RATH: Betsy, are you on the line as well?  
15 While Ms. Natz is joining us --

16 MS. NATZ: Can you hear me? I'm sorry.

17 MR. RATH: We can.

18 MS. NATZ: Okay. I'm not used to this web  
19 platform. This is Betsy Natz, CEO of the Kitchen  
20 Cabinet Manufacturers Association. We are --

21 JUDGE BELL: Welcome.

22 MS. NATZ: I'm sorry?

1 JUDGE BELL: Welcome.

2 MS. NATZ: Oh, thank you so much. We are grateful  
3 for the opportunity to provide comments on the proposed  
4 rule. KCMA was founded in 1955 and represents kitchen  
5 and bath cabinet manufacturers throughout North  
6 America. Our members employ thousands of workers and  
7 operate hundreds of manufacturing facilities across the  
8 United States. The association and our membership are  
9 committed to maintaining rigorous workplace safety and  
10 health standards, including in the area of heat stress.

11 KCMA members have implemented effective measures  
12 to manage workers' exposure to heat. These are  
13 measures specifically tailored to the unique  
14 environmental conditions of their facilities. We urge  
15 the agency to carefully reconsider whether it has the  
16 authority to promulgate a one-size-fits-all federal  
17 heat standard, and whether such a standard, if adopted,  
18 would meaningfully improve worker safety. I am joined  
19 today by the association's regulatory counsel, Manesh  
20 Rath, from the law firm of Keller and Heckman.

21 MR. RATH: Thank you, Betsy. Thank you, Judge  
22 Bell. And I want to thank also my colleagues from the

1 Occupational Safety and Health Administration for this  
2 opportunity. Our members, the members of the Kitchen  
3 Cabinet Manufacturers Association, are concerned about  
4 whether the agency has the statutory authority granted  
5 to it by Congress to promulgate a national heat  
6 standard of the kind it has proposed.

7 In the National Federation of Independent  
8 Businesses v. the Department of Labor Occupational  
9 Safety and Health Administration, the U.S. Supreme  
10 Court opined that Congress did not grant to OSHA the  
11 authority to issue a COVID-19 emergency temporary  
12 standard, specifically because the Court opined the  
13 hazard, the spread of COVID-19, was not a hazard unique  
14 to the workplace. Congress empowered OSHA in the act  
15 to ensure occupational safety by enforcing occupational  
16 safety and health standards, with the key word there  
17 being occupational safety and health standards, and not  
18 general public health standards.

19 I note that NIOSH stated in its 2016 NIOSH Report  
20 on Occupational Exposure to Heat and Hot Environments,  
21 which was cited in the proposed rule, that heat stress  
22 is considered to be the sum of two components: A, the



1 heat generated in the body -- metabolic heat, and B,  
2 the heat gained from the environment, which is  
3 environmental heat.

4 Yet, as one example of the concerns the members of  
5 the Kitchen Cabinet Manufacturers Association have, the  
6 draft standard sets an initial heat trigger that is  
7 entirely premised on the environmental heat index,  
8 which is not occupational in nature and pays no regard  
9 to the metabolic heat of the worker, which is the only  
10 component that could be generated by work, or thereby  
11 be occupational in nature.

12 MS. NATZ: So this leaves some sectors, like  
13 manufacturing, disproportionately affected by the draft  
14 standards requirements. For example, workers of  
15 manufacturers, such as those represented by KCMA, are  
16 often stationary and often generate much less metabolic  
17 heat than can typically be found, say in construction  
18 or agriculture. Manufacturing workers are mostly  
19 indoors, already under shade, and have access to water  
20 and electrical outlets where fans can be connected,  
21 thereby creating forced convection for rapid bodily  
22 heat dissipation.

1           Additionally, employers in manufacturing, as well  
2           as many other sectors, often set shift schedules to  
3           avoid peak daytime temperatures, typically by requiring  
4           employees to begin their work early in the morning and  
5           conclude by early afternoon. Yet, despite the fact  
6           that these interventions are already abundantly present  
7           in manufacturing, OSHA's one-size regulation would  
8           still impose upon manufacturers the remainder of the  
9           programming requirements, such as testing, training,  
10          monitoring, and recordkeeping.

11          Also, the standard tying these requirements solely  
12          to environmental heat ignores NIOSH's clear finding  
13          related to generated or metabolic heat. OSHA's trigger  
14          based on environmental heat ignores the best available  
15          science and further exceeds the agency's statutory  
16          mandate to only regulate hazards that are occupational  
17          in nature, and only in instances where there is a  
18          significant health risk.

19          The proposed rule's specifications as to break  
20          schedules is not workable in manufacturing. Most  
21          manufacturing operations are dependent upon teamwork.  
22          To eliminate one member from a task not only affects

1 operations requiring the team to slow or stop its  
2 process, but more importantly, will also affect worker  
3 safety.

4 Many two-person or multiple-person tasks have been  
5 designed that way to improve worker safety. For  
6 example, spotters, two-man lift techniques, and two-  
7 person tasks where one person loads or stabilizes  
8 material while another performs a task like cutting or  
9 polishing, have all been designed to reduce injuries in  
10 musculoskeletal disorders.

11 Similarly, a uniform acclimatization protocol for  
12 employers nationwide is unreasonable. Heat conditions  
13 vary across the country. For example, our members have  
14 informed us that changes to environmental temperatures  
15 in different locations occur at different rates,  
16 necessitating a tailored acclimatization schedule based  
17 on the location of their facilities. Mandating a  
18 nationwide protocol will impose an unnecessary  
19 regulatory burden on employers in cold weather states.

20 KCMA supports the other commenters who have raised  
21 concerns about the uniform acclimatization protocol,  
22 since the proposed rule was released on the grounds

1       that it is highly prescriptive, it is not tailored to  
2       work, and ignores the many confounding factors that may  
3       obviate the need for acclimatization or support -- or  
4       may support a shorter acclimatization schedule.

5           MR. RATH: In addition, our members have  
6       questioned whether the Occupational Safety and Health  
7       Administration has the authority to mandate that breaks  
8       be paid. Again, going back to the U.S. Supreme Court  
9       decision in NFIB v. The Department of Labor, the Court  
10      opined that Congress must, quote, "speak clearly when  
11      authorizing an agency to exercise powers of vast  
12      economic and political significance", end quote. In  
13      this case, two facts are clear: one, Congress did not  
14      expressly authorize OSHA to regulate worker pay, and  
15      two, Congress did expressly grant power to regulate the  
16      terms and conditions of labor to the Department of  
17      Labor's Wage and Hour Division.

18           Breaks may relieve the effects of heat stress, but  
19      OSHA has not presented any data indicating that paid  
20      breaks are more effective at addressing workplace heat  
21      stress than unpaid breaks. I'll note, as a  
22      parenthetical, that the record does reference in the

1 NPRM at pages 70787 and 70800, the interviews by  
2 Wadsworth published in 2019 of piece rate workers who  
3 brought their own water to reduce the number of breaks  
4 they took, or took fewer breaks. While this Wadsworth  
5 report may arguendo support a proposition that an  
6 employee is less likely to take a voluntary self-  
7 scheduled break, it carries no probity on the question  
8 of whether there is a heat stress reductive benefit  
9 from employer-mandated or employer-directed unpaid  
10 breaks.

11 MS. NATZ: The Kitchen Cabinet Manufacturers  
12 Association is grateful for the opportunity to share  
13 its concerns about the proposed rule as it is currently  
14 drafted, and we welcome the opportunity for the agency  
15 to collaborate with a wide spectrum of manufacturers in  
16 order to make a final rule more workable, and thereby  
17 safer for workers in our nation's manufacturing sector.  
18 Thank you so much.

19 JUDGE BELL: Thank you. Questions from OSHA?

20 MR. LEVINSON: Yes, Your Honor. Andrew Levinson  
21 for OSHA. Ms. Natz and Mr. Rath, thank you very much  
22 for your testimony. Let me start with -- I'm not a

1 lawyer. I'm going to play one on TV for a moment.  
2 OSHA has a 90-day post-hearing written comment and  
3 post-hearing legal brief period. And Mr. Rath, a  
4 number of the issues that you've raised, we certainly  
5 would welcome a legal brief for your position or KCMA's  
6 position on the issues that you've raised related to  
7 NFIB because we certainly would like to properly  
8 consider those issues.

9 I'm curious about the point that you raised on the  
10 generated metabolic heat from workers. OSHA does allow  
11 wet bulb globe temperature readings, and those formulas  
12 do allow people to fine-tune their estimates by  
13 including things like PPE worn and workload to address  
14 that metabolic - the generated metabolic heat. OSHA  
15 did not require that because of concerns of  
16 feasibility. Is it your contention that all employers  
17 should be required to consider the generated metabolic  
18 heat, or the workload from those employees as they  
19 consider heat safety?

20 MR. RATH: Thank you for that question, Mr.  
21 Levinson. It's an excellent question. It is not. It  
22 is my contention that that is the only sphere in which

1 the agency has the congressionally approved authority  
2 to issue a regulation. How the agency goes about doing  
3 so does require a lot more thoughts going forward and -  
4 between now and the revised final rule. But I think  
5 that you have identified the - the gravamen of the  
6 problem, and that is that there is an essential  
7 infeasibility problem with what OSHA is expecting of  
8 employers. That is to say, heat stress is the hazard  
9 that is occupational in nature, and employers have a  
10 tough time - frankly, I think anyone at the agency  
11 would have a tough time, and anyone in the medical  
12 profession would also admit to a tough time identifying  
13 the degree to which an employee is, at the moment,  
14 experiencing any of the effects of heat stress  
15 without - merely by observation.

16 And so the agency is putting an impossible burden  
17 on employers who are in the laity with respect to the  
18 medical profession, to try and figure that out. And it  
19 has taken a shortcut as a consequence, merely for the  
20 sake of feasibility, to set the hazard as environmental  
21 heat and not indeed the occupationally induced  
22 metabolic heat.

1           MR. LEVINSON: Thank you. During the testimony,  
2           you talked about using fans and ventilation and other  
3           sorts of things in the workplace. Can you talk about  
4           other things that KCMA members have used to address  
5           heat in their workplace?

6           MS. NATZ: So it varies. I will say that we have  
7           companies that -- obviously, we have three to four  
8           breaks provided in the eight-and-a-half hour shift.  
9           Water breaks, they -- many of them, especially in the  
10          warmer climate areas, provide electrolyte popsicles,  
11          again, fans and of course, they're free to go outside  
12          during these breaks where they have -- many of them  
13          have shade, you know, be it trees or what have you.

14          MR. LEVINSON: And has that generally been  
15          effective or overly burdensome?

16          MS. NATZ: I believe it has been effective, and I  
17          don't believe it has been overly burdensome.

18          MR. LEVINSON: Thank you. OSHA has no more  
19          questions, Your Honor.

20          JUDGE BELL: All right. How about the Solicitor?

21          MS. WILES: Thank you, Your Honor. Linda Wiles  
22          from the Solicitor's Office. I don't have any



1 questions at this time.

2 JUDGE BELL: All right. Are there any other  
3 questions for this panel?

4 MS. CARLON: There are not, Your Honor.

5 JUDGE BELL: All right. Ms. Natz, Mr. Rath, thank  
6 you very much for your testimony today. It's been very  
7 helpful.

8 MS. NATZ: Thank you.

9 MR. RATH: Thank you.

10 MS. NATZ: We appreciate it very much.

11 JUDGE BELL: By my schedule, it looks as though  
12 we're done for the day, am I right?

13 MR. LEVINSON: Yes, Your Honor.

14 JUDGE BELL: All right. So we're now at the end  
15 of the scheduled witnesses for today. I'd like to  
16 remind hearing participants that they may submit  
17 additional evidence or statements relevant to the  
18 proceeding within 90 days of the end of the hearing,  
19 which will be September 30th, 2025. At that point, the  
20 record for this rulemaking will close.

21 On behalf of the Department of Labor, I wish to  
22 publicly thank all those people who gave their time and

1           presented their testimony today to contribute to this  
2           hearing. To all participants, thank you for your  
3           interest in this important matter. We're hereby  
4           adjourned for the day. We'll reconvene at 9:30  
5           tomorrow. And I believe I will be back with you all  
6           tomorrow morning. Thanks, everybody.

7           MR. LEVINSON: Thank you, Your Honor.

8           JUDGE BELL: Okay. Good night.

9                       (Whereupon, at 4:27 p.m., the hearing was  
10          adjourned.)

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